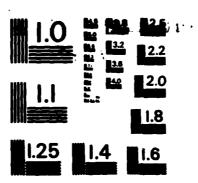
PERFORMANCE MONITORING SYSTEM: SUMMARY OF LOCK STATISTICS FOR ARRIL-JUNE11983(U) ARMY ENGINEER INST FOR WATER RESOURCES FORT BELVOIR VA M Y FLEMING ET AL. APR 84 IMR-84-SR-1 F/G 12/1 AD-A142 934 172 UNCLASSIFIED NL



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Engineer Institute for Water Resources

Performance Monitoring System: Summary of Lock Statistics for April - June 1983

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April 1984

Summary Report 84-SR-1
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	results of computations performed with these data	3.
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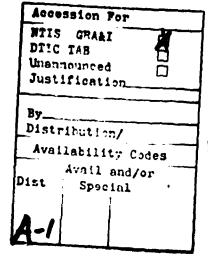
PERFORMANCE MONITORING SYSTEM SUMMARY OF LOCK STATISTICS APRIL 1983 - JUNE 1983

Marilyn V. Fleming and Kevin A. Alexander

U.S. Army Corps of Engineers Water Resources Support Center Institute for Water Resources Ft. Belvoir, Virginia 22060

April 1984

जनसङ्ग्री "उत्पन्नक वर्णकर १९५५६६ १९५५६६६ १९७५५६६ वर्णकरम्



Summary Report 84-SR-1

FREFACE

This report is a product of the Navigation Data Management and Analysis Branch of the U. S. Army Engineer Institute for Water Resources (WRSC-IWR). The information is compiled from statistics collected at the Corps locks in support of the lock Performance Monitoring System (FMS).

The study is managed by Mrs. Marilyn V. Fleming under the supervision of Mr. Francis M. Sharp, Chief of the WRSC-IWR Navigation Data Management and Analysis Branch, and Dr. Lloyd G. Antle, Chief of the WRSC-IWR Navigation Division. The Office of the Chief of Engineers (OCE) sponsors are Mr. Henry W. Campbell Jr., DAEN-CWD-M, and Mr. Robert M. Daniel, DAEN-CWF-S.

Requests to update or change the distribution, comments and questions can be directed to Frank Sharp (202-355-2240 or FTS 385-2240) or Marilyn Fleming at the same telephone number. The information is produced and distributed quarterly.

> ame 1. Hander AMES R. HANCHEY

Director, WRSC-IWR

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Introduction

The lock Performance Monitoring System (PMS) is a part of the Inland Navigation Systems Analysis (INSA) program and encompasses the collection, editing, maintenance and analysis of data collected at all Corps—owned and operated locks. The data have been collected since March of 1975 and consist of information describing the traffic through the locks as well as the physical aspects of lockages. The quarterly summary of selected statistics presented in the appendix provides an overview of the traffic and operation at each lock. The quarterly report is presented as a set of three tables for each Corps District. Information reported for each lock and chamber includes:

- 1) A listing providing the name of the lock, the river on which the lock is and its dimensions. In those cases where there is no quarterly information, this table will be the only display for the district.
- 2) A table providing, by direction and total, the number of tows, commercial vessels other than tows, recreational vessels, barges (empty and loaded), commercial lockages, recreational lockages and tonnage. and
- 3) A summary of approach, entry chambering and exit times (maximum, minimum and average) and the number of delays, total delay time, maximum delay time and average delay time.

Although the summary information will be computed and displayed for chambers at which there is data for only one or two months of the quarter, the fact is noted on the report.

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/03 THROUGH 6/03 INSTITUTE FOR WATER RESOURCES

EROC DISTR	ICT NAME	DIVISION NAME	MONTHS REPORTED						
D2 NEW 0	PLEANS	LOWER HISS VALLEY	4/83	5/83	6/82				
RIVER	FCODE-FOCk	MANE	LEN/WID/DRAFT	(FT/FT/FT)					
GULF INTRACOASTAL	01-PORT ALL	EN FOCK	1202/0084/15.0						
	02- BAYO U 50	RREL LOCK	0800/0056/16.0						
	03-1MMER HR	BR NAVIGATION CAME LK	0626/0074/40.0						
	04-ALGIERS	LOCK	0740/0075/15.0						
	05-HARVEY L	DCK	0426/0075/14.0						
	06-BAYOU BO	EUF LOCK	1148/0075/15.0						
	07-VERMILLI	ON FOCK	1195/0056/14.0						
	08-CALCAS IE	A FOCK	1194/0075/15.0						
ATCHAFALAYA RIVER	11-DERWICK	LOCK	0300/0045/11.0						
GULF INTRACOASTAL	21-SCHOOMER	BAYOU CONTROL STRUCT	9999/0075/14.0						
	22-CATFISH	POINT CONTROL STRUCT	9999/0056/16.0						
	23-CALCASIE	U SALT WATER BARRIER	9999/0054/15.0						
BAYOU TECHE	31-KEYSTONE	LOCK	0160/0036/12.0						
FRESHMATER BAYOU	41-FRESHMAT	ER BAYOU LDCK	0590/0084/15.0						
OLD RIVER		*·· -· -·	1200/0075/15.0						

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO BATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PERFORMANCE MONITORING SYSTEM (PMS) QUAPTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR MATER RESOURCES

EROC			DIVISION NAME			
\$ 3	ST. LOU	115	LOWER MISS VALLEY	4/83	5/83	6/83
RIVER		FCODE-FOCA	NAME	LEM/WID/DRAF	T (FT/FT/FT)	
KASKASKI	a river	01-KASKASK	IA RIVER NAVAGATION LE	0610/0084/12.	0	
MISSISSI	ST. LOUIS VER LCODE-LOC SKASKIA RIVER 01-KASKAS SSISSIPPI RIVER 24-LOCK 8 25-LOCK 8 26-LOCK 8 27-CHAIN	24-LOCK &	DAM 24	0610/0110/12.	0	
		25-LOCK &	DAN 25	0410/0110/12.	0	
		26-LOCK &	BAN 26	0610/0110/12.	0	
		26-LOCK &	BAN 26 AUI 1	0380/0110/12.	.0	
			F ROCKS LOCK & BAM 27	1210/0110/12.	0	
	• • •	27-CHAIN D	F ROCKS LK & DM 27 AX1	0610/0110/12.	.0	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

	CT MANE		ISION NA	-		MONTHS REPORTED							
13 57. LO			ER HISS \				4/8:	-	5/83				
ILVER/LOCK MANE	TOW	s vessl	VESSL	VESSL	MARSS	DARGS	BARGES		LCFGES				
		RECRIN	OTHER	TOTAL	EMPTY	FULL	101AL	COMMER	RECRIN			(A TOM	
			•••••	• • • • • • • • •	•••••	••••	*******	•••••		, DPN, I	·····	•	
Kaskaskia	RIVER												
ASKASKIA RIVER NAV	AGATION LX	•••											
UPSOUND STATISTICS	11	2 120	52	284	411	0	411	166	92	7	235		
SOMEONIO STATISTI	CS 11	1 135	44	312	0	425	425	177	69	6	252	67	
TOTALS	22	3 255	116	596	411	425	836	343	151	13	467	6 5	
MISSISSIPP	s aiver												
OCX & BAR 24		•••											
UPSOURD STATISTICS	41	5 4	24	581	4876	1380	6256	861	78	22	761	201	
DOWNDOWN STATISTE	CS 49	7 67	24	588	138	5716	5854	86 t	75	18	974	81:	
TOTALS	99	0 131	48	1167	5014	7096	12110	1742	153	40	1935	1016	
OCK & BAN 25		***											
UPSCUMB STATISTICS		• •••	34	648	4874	1361	6235	862	•	3	685	191	
SOURSOURS STATISTI			41	658	137	5706	5843	874	47	19	985	81	
TOTALS	78	5 246	75	1306	5011	7067	12978	1732	192	43	1967	101.	
OCX & BAN 24		***											
UPDOWN STATISTICS		-	12	471	848 3	2407	9090	1274	0	7	1281	361	
SOMEOUNE STATISTI		-	10	474	342	9042	8384	1267	4	7	1274	1141	
TOTALS	131	• •	n	1345	7025	10449	17474	2541	0	14	2522	150	
OCK & BAR 26 AUT 1		•••											
PSOME STATISTICS			58	448	1134	169	1634	725	27	:3	775	₹;	
BOMBOUND STATISTI		-	56	452	27;	1500	1781	761	34	23	820	27	
TOTALS	70	3 63	114	900	1407	:004	3411	1496	63	44	1595	278	
HAIN OF ROCKS LOCK	& BAR 27	***											
UPSCUMO STATISTICS		0 11	94	1175	8189	3057	11237	1167	•	16	1118	475	
DOMEGUNE STATISTE			143	1145	954	976?	10396	1072	7	\$	1084	1418	
TOTALS	204	1 32	197	2320	8007	12824	21633	1174	17	15	2267	180	

PERFORMANCE MONITORING SYSTEM (PWS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 "YSTITUTE FOR WATER RESOURCES

B2 ENGC	DISTRICT NAME ST. LOUIS			SION NON	-			MONTHS REPORTED 4/83 5/83 6/83								
P)	31. LUVI3					•••••	· · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •	,	3/8/	,	•′				
RIVER/LOC	X NAME	TOWS	VESSL RECRIN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARES FULL	BARGES TOTAL	LOCKES COMMER	RECRIM		LCFGES TOTAL ETCI	TOMMAGE (# TOMS)			
	nississippi river															
UP 900110	ROCHS LK & DM 27 AX STATISTICS O STATISTICS	319 332 651	10 46 48 14	110 138 248	475 518 993	558 201 759	158 736 894	716 937 1653	400 447 855	27 22 49	17 17 34	452 486 138	233 1097 1330			

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/03 THROUGH 6/03 INSTITUTE FOR WATER RESOURCES

ENOC 83	BISTRICT NAME ST. LOUIS									4/8		mentics a	B3	6/83			
****			MTRO	AC H		LOCX ENTRY	PROCI	ESS I ME	TIME	(Ala.	ı	EIII MG	MAI	: BELAYE	D BELAY 5 FINE (10	BELAY NUMBES!	METUAL
	K ag kagkia River																
K ac kack ja	allebunen einis f	LI	5	26	t	4	22	5	7	24	1	4	21	: 22	507	23.0	45
	AISSISSIPPI AIVER																
18CH 1 M	IN 24	1	•	82	1	•	30	5	7	28	1	16	54	: 996	425192	527.5	7500
18CX 1 M	W 25	1	•	115	1	•	30	3	•	27	ŧ	15	47	1 1043	214941	266.1	12662
18CX 1 M	M 26	1	3		1	•	43	4	•	24	1	11	54	: 1332	1712036	1205.3	11282
18CH & M	W 26 MU3 1	1	٨	92	t	7	75	4	•	28	1	11	*	: 907	551461	461.7	10121
CHAIN OF	MECKS LECK & BAN 2	7 1	•	43	1	7	30	5	10	81	ı	•	24	: 1739	114200	65.7	682
CMAIN OF	MOCKS LA & SM 27 A	1 1	4	**	ı	3	z	3	10	33	1	3	29	ı 304	3453	14.2	10

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FERFORMANCE MODITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4 83 THROUGH 6 87 INSTITUTE FOR MATER RESOURCES

	DISTRICT		STVISTON NAME	MONTHS REPORTED						
H	vices s or	16 	LOMES MISS VALLEY	4 81	5 63	6783				
river Duchita/Black	. Atv	LCODE-LOCH 01-JONESVIL 02-COLUMBIA 04-LOCH & B 04-LOCH & D	LE LOCK & DAR) LOCK & BAR AR &	LEM MID-DRAF UBSS 0084-23, UBSS 0084-27, USOU-0055-17, USOU-0055-18	4					

15555 COURSE COURSE CONTRACT CONTRACT CONTRACT CONTRACT CONTRACTOR

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PERFORMANCE MONITORING SISTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4.83 THROUGH 6-83 INSTITUTE FOR MATER RESOURCES

EROC	DISTRICT MARE		Divi	5164 MA	É			MONTHS REFORTED								
H	V I CX SBURS				ALEI			4/83		5. 83		6.83				
ILVER/LOCK		TOWS	VESSL RECRIM	VESSL	VESSL TOTAL	BARGS			LOCVES	LCHGES	LCI GES	LC46ES				
			MECH 188	U1988							OPN.		CM0+41			
GU	ICHETA/BLACK FIV															
OMESVILLE	LOCK & DAM	•	•													
UPBOUNG 51	ATISTICS	23	ŋ	9	4:	54	23	**	9	(r	::	42	42			
DOWNGOUNG	STATESTICS	35	ę.	-	37	22	54	70	4	ń	• •	38	114			
TOTALS		86	ŷ.	11	79	76	-0	155	17	**	67	80	156			
DLUMBIA LO	CX & SAM	•	•													
UPBOUND 51	TATISTICS	27	:	3	32	33	17	50	31	1	4	36	21			
DOWNGOUNG	STATISTICS	29	1	4	33	15	37	52	22	ý	1	34	78			
TOTALS		55	3	7	ట	48	54	102	64	i	5	76	99			
OCX & BAR	6	•	+ ONLY	THIRD NO	MIN REPO	ATED										
UP90UND 51	TATISTICS	0	0	1	i	Q	0	0	Ý	0	2	2	0			
DOMESTIC	STATISTICS	ù	٥	0	•	0	Ÿ	Ú	0	0	ŧ	ı	ø			
TOTALS		9	•	1	ı	•	•	•	Ú	ø	3	3	0			
OCX & BAR	•	•	ONLY	THERS IN	MTH REPO	MIEB										
UPSOUND ST	TAT IST ICS	0	11	1	12	Ů	0	9	2	5	2	•	(e			
DOMNOUND	STATISTICS	0	11	2	13	ij	•	0	1	•	4	14	Ú			
TOTALS		0	22	3	25	9	0	•	3	14	6	23	Ø			

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PERFORMANCE MOMITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

ENOC B4	DIVISION NAME LOWER MISS VALLEY									4/83	3	MO	MTHS REI 5/0		6/83				
			APPRO AV6		; MIN	ENTR	1		CHAMBE	R		Exit		:	DELAYED VESSELS	TIME	BELAY AVG I MINUTES	DELAY MAI	•
OU	CHITA/BLACK RIV																		
JONESVILLE	LOCK & DAM	1	4	10	1	3	25	1	3	18	2	6	20	:	2	2:	3 12.5	3 2	23
COLUMBIA LO	CX & BAR	1	5	19	1		16	5	3 13	30	5	7	20	:	0	(0.0)	0
FOCK # BWI	•	4	4	6	4	6	7	5	5 7	9	6	9	13	ı	0	(0.0)	0
LOCK & SAN	2	1	3	10	1	۱ 4	10		. 9	20	2	6	12		9	34	4.6) 1	10

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

ENOC DISTRICT NAME		DIVISION NAME	HON		
£2	NEW YORK	MORTH ATLANTIC	4/83	5/83	6/63
********	***********				
RIVER	FCODE-FOCK	MARE	LEN/WID/DRAFT	(FT/FT/FT)	
NUOSON RIVER	R 01-TRDY LDI	K & DAM	0493/0044/15.0		

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR MATER RESOURCES

EROC E3	DISTRICT NAME NEW YORK			SION NAM	-			4/83	_	NTHS REP 5/83		6/	783		
RIVER/LOCK	MANE	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRIN (NAV		TOTAL	TONNAGE (KTONS)	•	
н	JDSOM RIVER					*****							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	•	
TROY LOCK & DAM		•	10												
UPBOUND ST	TATISTICS	46	503	4	553	0	53	53	58	335	22	415	103		
DOMMBOUND	STATISTICS	43	230	5	279	41	;	44	50	171	23	244	1		
TOTALS		89	733	9	831	41	56	97	108	506	45	659	104		

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED

E3 NEW YORK NORTH ATLANTIC 4/83 5/83 6/83

LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY

APPROACH ENTRY CHAMBER EXIT : VESSELS TIME AVG MAX

MIN AVG MAX : MIN AVG MAX : MIN AVG MAX : MIN AVG MAX : (IN MINUTES)

HUBSON RIVER

TROY LDCK & DAM 2 8 25 2 5 20 5 10 20 1 4 10: 95 1228 12.9 50

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED NORTH ATLANTIC NORFOLK 4/83 £4

5/83

RIVER LCODE-LOCK NAME LEN/MID/DRAFT (FT/FT/FT) DISMAL SWAMP

01-DEEP CREEK LOCK 0300/0052/12.0 0300/0052/12.0 02-SOUTH MILLS LOCK

ATLANT INTRCOASTAL 11-GREAT BRIDGE GUARD LOCK 0600/0072/16.0

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME		IVIO	SION NAM	Ε				MO	NTHS REF	PORTED		
E4	NORFOLK		NORT	H ATLANT	IC			4/83		5/8:	3	6/	83
RIVER/LOCK N	AME	TOMS	VESSL RECRTM	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S COMMER	RECRIN	LCKGES OTHER V. OPN. I	TOTAL	TONNAGE (KTONS)
DIS	MAL SHAMP			·••••									
DEEP CREEK L	.OCK	•	11										
UPBOUND STA	TISTICS	0	203	0	203	0	0	0	i	82	4	87	0
DOWNBOUND S		0	219	0	219	0	0	0	1	130	3	134	0
TOTALS		0	422	0	422	0	0	0	2	212	7	221	0
SOUTH MILLS	LOCK	•	**										
UPBOUND STA	TISTICS	0	288	0	289	0	0	0	3	144	3	150	0
BONNBOUND S	TATISTICS	0	103	0	103	0	0	0	2	52	5	59	0
TOTALS		0	391	0	391	0	0	0	5	196	8	209	0
ATI	ANT INTRCOASTAL												
GREAT BRIDGE	SUARD LOCK	•	••										
UPBOUND STA	ATISTICS	145	2692	85	2922	97	83	180	227	925	28	1190	88
BOWNSOUND S	STATISTICS	157	450	88	895	80	131	211	231	327	32	59 0	120
TOTALS		302	3342	173	3917	177	214	391	458	1252	70	1780	208

PERFORMANCE MOMITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/03 THROUGH 6/03 INSTITUTE FOR WATER RESOURCES

EROC DISTRIC					VISION RTH AT							4/83	5	M	ONTHS RE 5/8		6/	83
			APPRO	-	: MIN	ENTRY	ı		CHAMBI	(MIN.) Er Max :		EXIT AV6	MAX	:	DELAYED VESSELS	TIME	DELAY AVG MINUTES)	DELAY NAX
DISMAL SWA	MP																	
DEEP CREEK LOCK		1	4	50	1	4	17	1	8	20	2	6	15	:	221	1126	5.1	120
SOUTH MILLS LOCK		1	2	16	1	3	15	3	11	17	2	3	13	:	209	7509	35.9	180
ATLANT INT	RCDASTAL																	
GREAT BRIDGE GUARD (LOCK	1	3	35	1	4	28	1	. 5	32	1	4	25	:	1784	7041	3.9	45

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/03 THROUGH 6/03 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED
F1 BUFFALO NORTH CENTRAL 4/83 5/83 6/83

RIVER LCODE-LOCK NAME LEN/MID/DRAFT (FT/FT/FT)

0650/0070/21.7

BLK ROCK CH/TONAMANDA 01-BLACK ROCK LOCK

PERFORMANCE MOMITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC DISTRICT MAN	E	DIVI	SION NAM	E				HC	WIHS REP	ORTED		
FI BUFFALO		MORT	H CENTRA	L			4/83	.	5/83		6/	93
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS COMMER	LCKGES RECRTN (NAV		TOTAL	TOWNAGE (FTONS)
BLK ROCK CH/TON		••										
BLACK ROCK LOCK UPBOUND STATISTICS	4	1268	25	1297	5	0	5	128	356	19	503	0
DOMEOUND STATISTICS	18	817	8	843	4	16	20	30	312	23	365	119
TOTALS	22	2085	33	2140	9	16	25	158	668	42	868	119

AND ANDERSON ASSESSED ANDROSON REGIONALL MANAGEN ANDROSON ASSESSED ASSESSED

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 4/83 INSTITUTE FOR MATER RESOURCES

EROC	DISTRICT NAME			B1*	VISIO	H HAME								H	IONTHS REI	PORTED			
FI	BUFFALO					ENTRAL						4/83	}		5/8	3		6/83	
	••••••		APPRO		. MIN	LOCX ENTRY	1	CH	MOEF			ELLI	MAI	:	DELAYED VESSELS	TIME	DELA AVG	M	ELAY
		nt#						 								-			
	BLX ROCK CH/TONAMA	WBA																	
M ACK DO	ירא ו מרונ	1	1	15	1	1	15	1	12	20	1	ı	12	:	861	37	20	4.2	57

PERFORMANCE NOMITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR MATER RESOURCES

EROC	DISTRICT MANE	DIVISION NAME		IONTHS PEPORTED	
F3 	DETROIT	NORTH CENTRAL	4/83	5/83	6.83
ALVER	LC0 86 -L	OCK MAME	LEN/U10/DRAF	1 (F1/F1/F1)	***************
ST MARYS	AIVER 01-MACA	RTHUR LOCK	0000/0000/31.	0	
	02- HEW	POE LOCK	1200/0110/32.	0	
	03- BA V[S LOCKOO	1350/0000/31.	0	
		N FOCKOO	1350/0080/31.	0	
		SON LOCK	0000/0000/++	•	
FOI RIVE	11- 6 E P	ERE LOCK & DAM	0146/0036/ 6.	0	
	12-1177	LE KAUKAUMA LOCK & DAM	0146/0036/ 6.	0	
	13-RAP1	BE CROCHE LOCK & BAN	0146/0036/ 6.	0	
	21-KAUK	AUMA LOCK 1	0144/0035/ 6.	0	
	22-KAUK	AUNA LOCK 2	0144/0035/ 6.	0	
	23-KAUK	AUMA LOCK 3	0144/0037/ 6.	0	
	24-KAUK	AUMA LOCK 4	0144/0037/ 6.	0	
	25-kauk	AUMA LOCK 5	0144/0036/ 6.	0	
	32-L111	LE CHUTE LOCK 2	0142/0035/ 6.	0	
	33-LITT	LE CHUTE COND LOCKS UPPER	0144/0037/ 6.	0	
		LE CHUTE COMO LOCKS LOWER	0146/0036/ 6.	0	
	35-CEBA	RS LOCK & BAN	0144/0035/ 6.	0	
		ETON LOCK 1	0145/0035/ 6.	0	
	42-APPLI	ETON LOCK 2	0145/0035/ 6.	0	
	43-APPLI	ETON LOCK 3	0144/0035/ 6.	0	
	44-APPL	ETON LOCK 4	0144/0035/ 6.	0	
	51-MENAS	SHA LOCK & SAM	0144/0035/ 6.	0	

PERFORMANCE NOMITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 4/83 INSTITUTE FOR MATER RESOURCES

EROC F3	DETROIT		MORT	ISTON NAMED IN CENTRAL	K.			4/8	3	aiths fiel 5/8:	3		62
A I VER/LOCK	MANE		VESSL		VESSL		BARSS	BARGES	rocx.e2	LCYGES RECRIN	LCAGES	LCXGES 101AL	TOWNAS
********		******	*******		••••••	******		•••••	•••••	*******	••••••	•	*****
5	it marys river												
RACARTHUR			ONLY		_	_							
	STATISTICS	67		11	78			67	82		13	95	114
TOTALS	STATISTICS	92 159		9 20	102 1 0 0	- 3 62	103 111	106 173	106 1 08	ý	10 23	116 211	17 98 1912
MEN POE LO			• (MLY		wtu 669 6	- 168							
	TATISTICS	146	0	19 19	156	115	26	143	159	Ģ	4	163	395
	STATISTICS	103	ò	24	127	13	97	110	120		11	131	2928
TOTALS		243	6	40	283	128	125	253	279		15	294	3323
DAVIS LOCK	•	M 14	NTA RECOI	ISED FOR	THIS LOC	I.							
SABIN LOCK		M 14	ATA RECO	IDEO FOR	THIS LOC	R							
1	HE INLAND NOUTE												
ALAMBON LO	Cx	110 B/	NIA RECOV	ISED FOR	THIS LOC	x							
F	OI AIVER												
DE PERE LO	Cr & BAN	MQ \$4	NTA RECO	ISEB FOR	THIS LOC	K							
LITTLE KAN	MANNA LOCK & SAN	M 8	ATA RECO	IDED FOR	THIS LOC	ĸ							
AMPIRE CRO	CHE LOCK & BAR	NO 14	NTA RECOI	IDED FOR	THIS LOC	r							
KANKANA L	9CX 1	NO 8	ATA RECOI	MED FOR	THIS LOC	×							
K AUKAUN A L	.OCK 2	110 B	ATA RECO	DED FOR	THIS LOC	ĸ							
K ANKANN A L	.OCK 3	M 8	ATA RECO	IDED FOR	THIS LOC	×							
K AUKAUN A L	.OCX 4	MO 94	ATA RECU	IDED FOR	THIS LOC	y							

PERFORMANCE MODITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE FERIOD 4/83 THROUGH 6/83 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT N F3 DETROIT	AME		SION NAM 'N CENTRA	-			4/8:	-	MTHS REP 5/83	 6/	83	
RIVER/LOCK MAME	TONS	VESSL RECRIN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS Full	BARGES TOTAL		RECRIN	LCKGES TOTAL ETC!	TONNAGE (KTONS)	

FOI RIVER

LITTLE CHUTE LOCK 2 NO DATA RECORDED FOR THIS LOCK

LITTLE CHUTE COMO LOCKS UPPER NO DATA RECORDED FOR THIS LOCK

LITTLE CHUTE COMO LOCKS LOWER - NO DATA RECORDED FOR THIS LOCK

CEBARS LOCK & BAR NO BATA RECORDED FOR THIS LOCK

APPLETON LOCK 1 NO DATA RECORDED FOR THIS LOCK

APPLETON LOCK 2 NO BATA RECORDED FOR THIS LOCK

APPLETON LOCK 3 NO BATA RECORDED FOR THIS LOCK

APPLETON LOCK 4 NO BATA RECORDED FOR THIS LOCK

MEMASMA LOCK & BAM NO DATA RECORDED FOR THIS LOCK

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC DISTRICT NAME F3 DETROIT			CENTRA	_					4/83		NONTHS RE 5/8		6/	83
	APPRO MIN AVS	ACH	LOCK	PROCESS	ING T	INE ANDE	(MIN. R	ŀ	EXIT	:	DELAYED VESSELS	DELAY TIME	DELAY	DELAY
ST MARYS RIVER					****				•••••			*******	*******	*******
NACARTHUR LOCK	1 13	49	1 6	20	8	13	160	ı	6	25 :	209	1616	7.1	110
NEW POE LOCK	1 12	58	1 7	7 39	3	15	38	i	7	46 :	294	2468	8.4	122
DAVIS LUCKOO	NO DAT	A RECORE	ED FOR	THIS LOC	X.									
SABIN LDCKOO	NG DA1	A RECORD	ED FOR	THIS LOC	ik .									
THE INLAND ROUTE														
ALANSON LOCK	NO DAT	A RECORI	ED FOR	THIS LOC	:K									
FOX RIVER														
DE PERE LOCK & DAM	NO DAT	A RECOR	ED FOR	THIS LOC	X.									
LITTLE KAUKAUNA LOCK & DAN	NO DAT	A RECORI	ED FOR	THIS LOC	K .									
RAPIDE CROCHE LOCK & DAM	NO DAT	A RECORI	ED FOR	THIS LOC	;K									
KAUKAUNA LOCK 1	NO DAT	A RECORI	ED FOR	THIS LOC	X									
KAUKAUNA LOCK 2	NO DAT	A RECORI	ED FOR	THIS LOC	;k									
KAUKAUNA LOCK 3	NO BAT	A RECORI	ED FOR	THIS LOC	;ĸ									
KAUKAUNA LOCK 4	NO DA	A RECOR	ED FOR	THIS LOC	;ĸ									
KAUKAUNA LOCK 5	NG DAT	IA RECORI	ED FOR	THIS LOC)K									
LITTLE CHUTE LOCK 2	NO DA	IA RECORI	ED FOR	THIS LOC	X.									
LITTLE CHUTE COMB LOCKS UPPE	R NO DA'	IA RECORI	ED FOR	THIS LOC	:K									

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME DETROIT	DIVISION NAME NORTH CENTRAL	4/83	MONTHS REPORTED 5/83	6/83
		LOCK PROCESSING TIME (NIN.) APPROACH ENTRY CHAMBER AVG MAX: MIN AVG MAX:	EXIT	: DELAYED DELAY : VESSELS TIME : (I	DELAY DELAY AVG MAX N MINUTES)

FOI RIVER

LITTLE CHUTE COMB LOCKS LOWER NO DATA RECORDED FOR THIS LOCK

CEBAPS LOCK & DAM NO DATA RECORDED FOR THIS LOCK

APPLETON LOCK 1 NO DATA RECORDED FOR THIS LOCK

APPLETON LOCK 2 NO DATA RECORDED FOR THIS LOCK

APPLETON LOCK 3 NO DATA RECORDED FOR THIS LOCK

APPLETON LOCK 4 NO DATA RECORDED FOR THIS LOCK

MENASHA LOCK & DAM NO DATA RECORDED FOR THIS LOCK

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR MATER RESOURCES

EROC DI	STRICT NAME	DIVISION NAME	MONTHS RE	PORTED
F4 RO	CK ISLAND	NORTH CENTRAL	4/83 5/8	3 6/83
RIVER	FCODE-FOCK	NAME	LEN/WID/DRAFT (FT/FT	/FT)
ILLINOIS	01-THOMAS	J O'BRIEN	1200/0110/12.0	
	02-LOCKPOR	T LOCK	1200/0110/12.0	
	03-Brandon	ROAD LOCK & DAM	1200/0110/12.0	
	04-DRESDEN	ISLAND LOCK & DAM	1200/0110/12.0	
	05-NARSIELI	LES LOCK & DAM	1200/0110/12.0	
	06-STARVED	ROCK LOCK & DAM	1200/0110/12.0	
	07-PEORIA	LOCK & DAM	1200/0110/12.0	
	08-Lagrang	E LOCK & DAM	1200/0110/12.0	
MISSISSIPPI R[V	ER 11-LOCK &	DAN 11	1350/0110/10.0	
	12-LOCK &	DAN 12	1350/0110/10.0	
	13-FOCK #	DAM 13	1350/0110/10.0	
	14-LOCK &	DAM 14	1350/0110/10.0	
	14-LOCK & I	DAM 14 AUXILIARY 1	1350/0110/10.0	
	15-LOCK &	DAM 15	1350/0110/10.0	
	15-LOCK & 1	DAM 15 AUXILIARY 1	1350/0110/10.0	
	16-LOCK &	DAM 16	1350/0110/10.0	
	17-LOCK &	DAN 17	1350/0110/10.0	
	18-LOCK &	DAM 18	1350/0110/10.0	
	19-LOCK &	DAM 19	1350/0110/10.0	
	19-LOCK &	DAM 19 AUXILIARY 1	1350/0110/10.0	
	20-LOCK &	DAM 20	1350/0110/10.0	
	21-LOCK &	DAM 21	1350/0110/10.0	
	22-LOCK &	DAN 22	1350/0110/10.0	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/03 THROUGH 6/03 INSTITUTE FOR WATER RESDURCES

	TRICT NAME K ISLAND			SION NAM TH CENTRA	-			4/83		INTHS REF 5/83		6/	83
ATHER II SAW MAME													
IVER/LOCK NAME		TOMS	VESSL RECRTN		VESSL TOTAL	BARGS Empty	BAR6S Full			RECRYN		LCKGES TOTAL FTC)	
ILLINOI	S												
HOMAS J O'BRIEN			••										
UPBOUND STATIST	ICS	377	2568	74	3019	469	513	982	445	896	16	1357	729
DOWNBOUND STATE		354	1911	78	2343	337	609	946	429	630	14	1073	997
TOTALS		731	4479	152	5362	806	1122	1928	874	1526	30	2430	1726
OCKPORT LOCK		•	••										
UPBOUND STATIST	ICS	459	119	56	634	540	1860	2400	525	66	2	593	2831
DOWNBOUND STATES	STICS	487	65	49	601	1383	1025	2408	552	44	2	598	1613
TOTALS		946	184	105	1235	1923	2885	4808	1077	110	4	1191	4444
RANDON ROAD LOC	K & DAM	•	••										
UPBOUND STATIST	ICS	447	145	94	686	632	1907	2539	574	83	4	661	2905
DOWNBOUND STATE	STICS	473	70	75	618	1405	1096	2501	570	52	1	623	1724
TOTALS		920	215	169	1304	2037	3003	5040	1144	135	5	1284	4629
RESDEN ISLAND L	OCK & DAM	•	••										
UPBOUND STATIST	ICS	421	263	39	723	730	1918	2648	527	143	7	677	2939
DOWNBOUND STATE	STICS	428	243	39	710	1295	1308	2603	546	119	8	673	2158
TOTALS		849	506	78	1433	2025	3226	5251	1073	262	15	1350	5097
ARSIELLES LOCK	& DAM		**										
UPBOUND STATIST	ICS	399	208	43	650	1001	1713	2714	540	109	16	665	2775
DOWNBOUND STATE	STICS	413	230	35	678	1047	1648	2695	539	116	17	672	2651
TOTALS		812	438	78	1328	2048	3361	5409	1079	225	33	1337	5426
TARVED ROCK LOC	K & DAM	+	••										
UPBOUND STATIST	ICS	417	226	45	688	1253	1730	2983	583	107	9	699	2794
DOWNBOUND STATE	STICS	444	263	30	737	1039	1939	2978	584	108	7	699	3039
TOTALS		861	489	75	1425	2292	3669	5961	1167	215	16	1398	5833
EORIA LOCK & DAI	N	•	• •										
UPBOUND STATIST	ICS	462	129	60	651	2063	1996	4059	85	63	463	611	3256
DOWNBOUND STATES	STICS	487	118	38	643	1034	3003	4037	100	49	460	609	4521
TOTALS		949	247	98	1294	3097	4999	8096	185	112	923	1220	7777

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

ERDC DISTRICT NAME F4 ROCK ISLAND		NOR1	SION NA H CENTR	IAL			4/83	3	NTHS REF 5/83	3		B 3
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL	VESSL Total	BARGS EMPTY	BARGS Full		LOCK6S	LCKGES RECRTN	LCKGES	LCKGES TOTAL	TONNAGE (KTONS)
ILLINOIS												
LAGRANGE LOCK & DAM	**											
UPBOUND STATISTICS	452	17	11	480	2551	1523	4074	23	9	448	480	2557
DOWNBOUND STATISTICS	475	9	8	492	498	3587	4085	23	5	477	505	5351
TOTALS	927	26	19	972	3049	5110	8159	46	14	925	985	7908
MISSISSIPPI RIVER												
LOCK & DAM 11	**											
UPBOUND STATISTICS	324	340	67	731	2691	1000	3691	543	253	8	804	1456
DOWNBOUND STATISTICS	333	329	64	726	241	3167	3408	525	240	В	773	4573
TOTALS	657	669	131	1457	2932	4167	7099	1068	493	16	1577	6029
LOCK & DAM 12	**											
UPBOUND STATISTICS	359	344	12	715	3015	1081	4096	557	249	7	813	1578
DOWNBOUND STATISTICS	362	357	15	734	224	3540	3764	561	263	7	831	5102
TOTALS	721	701	27	1449	3239	4621	7860	1118	512	14	1644	66B0
LOCK & DAN 13	**											
UPBOUND STATISTICS	363	378	20	761	3020	1084	4104	570	244	4	818	1582
DOWNBOUND STATISTICS	368	327	17	712	239	3556	3795	586	212	3	801	5128
TOTALS	731	705	37	1473	3259	4640	7899	1156	456	7	1619	6710
LDCK & DAM 14	+4											
UPDOUND STATISTICS	472	198	19	689	3794	1266	5060	766	154	6	926	1828
DOWNBOUND STATISTICS	483	190	19	692	242	4407	4649	759	160	6	925	6065
TOTALS	955	388	38	1381	4036	5673	9709	1525	314	12	1851	7893
LOCK & DAM 14 AUXILIARY 1	*4	# DNLY	SECOND	AND THIRD	MONTHS	REPORTED						
UPBOUND STATISTICS	0	903	0	903	0	0	0	0	213	0	213	0
DOWNBOUND STATISTICS	Ŏ	1074	Ŏ		ŏ	Ŏ	ŏ	ŏ	255	ŏ	255	ŏ
TOTALS	0	1977	0		Ò	Ö	Ó	Ö	468	Ò	468	Ô

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC F4	DISTRICT NAME ROCK ISLAND			SION NAM 'H CENTRA	-			4/83		ONTHS REPORTED 5/83		6/83	
IVER/LOCK		TOWS	VESSL RECRTN	VESSL	VESSL TOTAL	BARGS EMPTY	BARGS Full			RECRTN			TONNAGE (KTONS)
ħ	ISSISSIPPI RIVER			******									
OCK & DAM	15		••										
UPBOUND S		458	20	44	522	3592	1316	4908	817	29	6	852	1909
	STATISTICS	458	26	45	529	265	4183	4448	793	34	3	830	5991
TOTALS		916	46	89	1051	3857	5499	9356	1610	63	9	1682	7900
	15 AUXILIARY 1 TATISTICS	64	648 648	47	759	51	31	82	109	337	4	450	44
	STATISTICS	61	698	4/ 41	800	51 41	38	79	101	333	4	438	53
TOTALS	GINITALIES	125	1346	88	1559	92	50 69	161	210	670	8	888	97
TOTAL		120	2010		1007	′-	•	•••		•	•		•
OCK & DAN	16	•	**										
UPBOUND S	TATISTICS	490	127	37	654	3904	1393	5297	832	127	12	971	2038
	STATISTICS	483	139	42	664	291	4559	4850	806	129	8	943	6511
TOTALS		973	266	79	1318	4195	5952	10147	1638	256	20	1914	8549
LOCK & DAM 17			4+										
UPBOUND S	TATISTICS	465	64	13	542	4018	1497	5515	812	83	20	915	2184
DOWNBOUND	STATISTICS	465	88	15	568	357	4769	5126	801	88	17	906	6799
TOTALS		930	152	28	1110	4375	6266	10641	1613	171	37	1821	8983
OCK & DAM	19		**										
- -	TATISTICS	460	140	26	626	4174	1496	5670	797	156	11	964	2175
	STATISTICS	470	175	20	665	353	4944	5297	804	136	8	948	7027
TOTALS		930	315	46	1291	4527	6440	10967	1601	292	19	1912	9202
OCK & DAM	1 10		**										
	TATISTICS	460	93	61	614	4466	1362	5828	499	50	13	562	1987
	STATISTICS	471	81	57	609	200	5239	5439	488	40	5	533	7456
TOTALS		931	174	118	1223	4666	6601	11267	987	90	19	1095	9443
	I 19 AUXILIARY I	MU V	ATA DECM	RDED FOR	THIS LOS	יעי							
THE SHE	I I' MUALLIMII I	40 D	NIM NEGU	NATE A LAK	INIS LOC	4R							
.DCK & DAM	20		**										
	TATISTICS	469	81	57	607	4568	1394	5962	861	66	18	945	2028
	STATISTICS	470	81	63	614	187	5372	5559	858	73	11	942	7619
TOTALS		939	162	120	1221	4755	6766	11521	1719	139	29	1887	9647

ARRESTED ACCORDES OFFICIALS SECREDISC REPORTED BUSINESS SECREDISC (REDDING)

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME ROCK ISLAND	DIVISION NAME						HONTHS REPORTED							
F4		NORTH CENTRAL						4/83		5/83		6/	83		
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S Commer	LCKBES RECRTN (NAV	LCKGES OTHER , DPN, E	LCKGES TOTAL ETC)	TONNAGE (KTONS)		
M	ISSISSIPPI RIVER														
LOCK & DAM 21		#1	F#												
UPBOUND ST	TATISTICS	469	80	31	580	4665	1329	5994	839	84	17	940	1967		
DOMNBOUND	STATISTICS	480	85	29	594	132	5522	5654	862	79	10	951	7834		
TOTALS		949	165	60	1174	4797	6851	11648	1701	163	27	1891	9801		
LOCK & DAM 22		44	Fŧ												
UPBOUND ST	TATISTICS	474	106	26	606	4719	1359	6078	847	82	13	942	1996		
DOWNBOUND	STATISTICS	482	88	24	594	112	5561	5673	867	64	10	941	7921		
TOTALS		956	194	50	1200	4831	6920	11751	1714	146	23	1883	9917		

TO LOCACIO POR PARA PROPERTO PROPERTO PORTORIO PORTORIO PORTORIO PERSONAL PERSONAL

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESDURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED F4 ROCK ISLAND NORTH CENTRAL 4/83 5/83 6/83 LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY DELAY ENTRY CHAMBER EXIT : VESSELS TIME AVG APPROACH MIN AV6 MAX : MIN AV6 MAX : MIN AV6 MAX : MIN AV6 MAX : (IN MINUTES) ILLINOIS THOMAS J O'BRIEN 3 13 35 1 2 75 15: 244 3482 14.3 104 2 65 LOCKPORT LOCK 806 72969 90.5 1457 25 148 80 : BRANDON ROAD LOCK & DAM 824 84975 103.1 10 444 9 435 19 400 85 : 2279 DRESDEN ISLAND LOCK & DAM 8 438 78 69 : 547 122103 223.2 87840 MARSIELLES LOCK & DAM 98 50 B4 : 542 86262 159.2 969 STARVED ROCK LOCK & DAM 98 9 353 13 108 470 102947 219.0 43315 PEORIA LOCK & DAM 71 35 159 13916 87.5 318 LAGRANGE LOCK & DAM 1 1 61 1 31 20 50: 74 56898 768.9 43200 MISSISSIPPI RIVER LOCK & DAM 11 7 126 32 11 139: 376 39732 105.7 1557 LOCK & DAM 12 35 391 76545 195.8 44640 66 : LOCK & DAM 13 36 67 365 30909 84.7 4320 LOCK & DAM 14 6 458 7 70 547 62484 114.2 1440 LOCK & DAM 14 AUXILIARY 1 13 63 1: 0.0 LOCK & DAM 15 85 7 32 374 80: 152363 271.6 85039 LOCK & DAM 15 AUXILIARY 1 1 1 41 1 1 27 1 10 118 1 1 12: 22 257 11.7 27

EROC F4	DISTRICT NAME ROCK ISLAND					NAME ENTRAL						4/83	,	MONTHS RE 5/8		6/	83
	••••••••••••		APPRO			LOCK Entry	PROCE	SSING	T I ME	(MIN.)	EXIT		: DELAYED : VESSELS	TIME	DELAY AVB MINUTES)	DELAY MAX

	MISSISSIPPI RIVER																
LOCK & DA	AM 16	1	9	85	i	8	29	1	7	32	1	15	48	: 687	88007	128.1	13025
LOCK & D	AN 17	1	11	110	1	7	28	3	8	28	1	14	75	: 637	84139	132.1	1721
LOCK & D	AM 18	1	10	436	i	8	37	i	5	37	1	16	53	: 670	179055	267.2	44640
LOCK & O	AN 19	1	18	94	1	7	32	2	15	43	1	9	31	: 552	60903	110.3	1175
FOCK & D	AM 19 AUXILIARY 1	N	O DAT	A RECI	DRDED	FOR 1	HIS L	.OCK									
LOCK & D	AM 20	i	6	59	1	8	439	1	5	34	i	16	71	: 628	210236	334.8	7721
LOCK & D	AM 21	1	8	97	1	9	39	1	4	25	1	16	80	: 653	107101	164.0	7745
LOCK & D	AM 22	1	11	92	ı	10	415	1	5	184	1	20	93	: 801	308125	384.7	9350

EROC	DISTRICT	NAME	DIVISION NAME	KON	THS REPORTED	
FS	ST. PAUL		NORTH CENTRAL	4/83	5/83	6/83
RIVER		LCODE-LOCK NAME		LEN/WID/DRAFT	(FT/FT/FT)	
MISSISSIPP	RIVER	01-LOCK & DAM 1	MAIN CHBR 1	0400/0056/11.0		
		01-LOCK & DAM 1	MAIN CHBR 2	0400/0056/11.0		
		02-LOCK & DAM 2		0600/0110/11.0		
		02-LOCK & DAM 2	AUXILIARY 1	0500/0110/11.0		
		03-LOCK & DAM 3		0600/0110/11.0		
		04-LOCK & DAM 4		0600/0110/11.0		
		05-LOCK & DAM 5		0600/0110/11.0		
		06-LOCK & DAM 6		0600/0110/11.0		
		07-LOCK & DAM 7		0600/0110/11.0		
		08-LOCK & DAM 8		0600/0110/11.0		
		09-LDCK & DAM 9		0600/0110/11.0		
		10-LOCK & DAM 10	1	0600/0110/11.0		
		51-ST ANTHONY FA	LLS UPPER L & D	0400/0056/11.0		
		52-ST ANTHONY FA	ILLS LOWER L & D	0400/0056/11.0		
		55-LOCK & DAM SA	1	0600/0110/11.0		

EROC DIST F5 ST.	RICT MAME PAUL		NORT	SION NA H CENTR	AL			4/83	3	NTHS REP 5/83	,	_	83
RIVER/LOCK NAME		TOWS	VESSL RECRIN	VESSL	VESSL TOTAL	BARGS EMPTY	BAR6S Full		LOCKES	LCKGES RECRTN	LCK6ES	LCKGES TOTAL	TONNAG
MISSISSI	PPI RIVER												
.GCK & DAM I MAIN	CHBR 1	#1	13										
UPBOUND STATISTI		168	522	26	716	133	158	291	198	294	11	503	214
DOWNBOUND STATIS		169	559	22	750	122	153	275	197	306	9	512	219
TOTALS		337	1081	48	1466	255	311	566	395	600	20	1015	433
OCK & DAM 1 MAIN	CHBR 2	•	+ ONLY	SECOND	AND THIRD	MONTHS	REPORTED						
UPBOUND STATISTI	CS	24	56	2	82	13	31	44	30	4:	3	74	41
DOWNBOUND STATIS	TICS	27	49	4	80	34	20	54	33	38	2	73	27
TOTALS		51	105	6	162	47	51	98	63	79	5	147	68
DCK & DAM 2		4 1	10										
UPBOUND STATISTI	CS	321	658	13	992	2726	424	3150	431	404	15	850	635
DONN'SDUND STATIS	TICS	335	723	8	1966	51	2974	3025	440	425	14	879	4275
TOTALS		656	1381	21	2058	2777	3398	6175	871	829	29	1729	4910
DCK & DAM 2 AUXI	LIARY 1	NO DI	TA RECOR	DED FOR	THIS LOC	K							
DCK & DAM 3		6 1	1 4										
UPBOUND STATISTI	CS	266	1027	106	1399	2407	431	2838	446	486	35	967	644
DOWNBOUND STATIS	TICS	277	1057	97	1431	35	2634	2669	363	522	24	909	3833
TOTALS		543	2084	203	2830	2442	3065	5507	809	1008	59	1876	4479
OCK & DAM 4		#1	H										
UPBOUND STATISTI	CS	276	645	10	931	2517	442	2959	369	423	60	852	640
DOWNBOUND STATES	TICS	284	673	10	967	34	2722	2756	379	417	52	848	395
TOTALS		560	1318	20	1898	2551	3164	5715	748	840	112	1700	4595
DCK & DAM 5		•	18										
UPBOUND STATISTI	CS	280	455	13	748	2410	568	2978	391	299	71	761	815
DOWNBOUND STATIS	TICS	281	499	8	788	62	2641	2703	383	317	77	777	3833
TOTALS		561	954	21	1536	2472	3209	5681	774	616	148	1538	4646

EROC DISTR F5 ST. P	ICT NAME AUL			ISION NAME 'H CENTRAL				4/83		MTHS REP 5/83		6/	62
RIVER/LOCK NAME		TOWS	VESSL RECRTN		VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL		RECRIN		TOTAL	TOMNAGE (KTONS)
MISSISSIP	PI RIVER												
LOCK & DAM 6		•	••										
UPBOUND STATISTIC	5	283	508	7	798	2571	534	3105	391	402	25	818	789
DOWNBOUND STATIST		293	503	'n	803	44	2827	2871	397	407	22	826	4093
TOTALS		576	1011	14	1601	2615	3361	5976	788	809	47	1644	4882
LOCK & DAM 7		•	**										
UPBOUND STATISTIC	S	284	1131	49	1464	2546	561	3107	410	595	17	1022	828
DOWNBOUND STATIST	ICS	293	1057	50	1400	74	2800	2874	385	593	18	996	4051
TOTALS		577	2188	99	2864	2620	3361	5981	795	1188	35	2018	4879
LOCK & DAM 8			**										
UPBOUND STATISTIC	5	282	324	7	613	2598	594	3192	414	259	17	690	885
DOWNBOUND STATIST	ICS	288	337	14	639	47	2853	2900	418	253	18	689	4146
TOTALS		570	136	21	1252	2645	3447	6092	832	512	35	1379	5031
LOCK & DAM 9			4+										
UPBOUND STATISTIC		278	369	4	651	2376	868	3244	409	303	11	723	1269
DOWNBOUND STATIST	ICS	285	336	7	628	255	2733	2988	422	267	14	703	3963
TOTALS		563	705	11	1279	2631	3601	6232	831	570	25	1426	5232
LOCK & DAM 10			**										
UPBOUND STATISTIC		340	522	13	875	2823	886	3709	482	391	23	896	1278
DOWNBOUND STATIST	ICS	331	559	26	916	224	3195	3419	489	376	22	887	4592
TOTALS		671	1081	39	1791	3047	4081	7128	971	767	45	1783	5870
ST ANTHONY FALLS U			**								_		
UPBOUND STATISTIC	-	115	359	38	512	96	69	165	151	146	2	299	112
DOWNBOUND STATIST	ICS	119	415	30	564	54	101	155	148	170	2	320	137
TOTALS		234	774	68	1076	150	170	320	299	316	4	619	249
ST ANTHONY FALLS L													
UPBOUND STATISTIC	-	199	364	27	590	146	194	340	226	144	9	379	260
DOMNBOUND STATIST	ICS	196	428	27	651	158	169	327	224	173	13	410	230
TOTALS		395	792	54	1241	304	363	667	450	317	22	789	490

EROC F5	DISTRICT NAME ST. PAUL			SION NAN H CENTRA	_			4/8	-	MTHS REP 5/83		£.	183
	31, rmp.							7/Q.	· • • • • • • • •	J, 0.	•		
RIVER/LOCK	NAME	TONS	VESSL RECRIN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKES COMMER			TOTAL	TONMAGE (KTONS)
ľ	NISSISSIPPI RIVER												
LOCK & BAN	• • • • • • • • • • • • • • • • • • • •		••					•••					
UPBOUND S	TATISTICS STATISTICS	277 284	721 724	67 65	1065 1073	2439 47	522 2684	2961 2731	432 378	436 452	39 39	907 869	767 38 99
TOTALS		561	1445	132	2138	2486	3206	5692	810	888	78	1776	4666

EROC DISTRICT NAME FS ST. PAUL			NOF	ISION TH CE	NTRAL						4/83		MONTHS RE 5/8	3	6/1	-
	A Mjn	PPROA AVG	CH NAI :	 	LOCK ENTRY AVS	PROCE NAX	SSING (T LINE HAMBE AV6	(MIN.) R MAX :	MEN	EIII AVA	MAX :	DELAYED VESSELS	DELAY TIME (IN	DELAY AV6 MINUTES)	DELAY
MISSISSIPPI RIVER																
LOCK & DAM 1 HAIN CHBR 1	1	2	10	1	4	40	2	11	27	1	3	25 :	192	2878	15.0	72
LOCK & DAM I MAIN CHOR 2	1	3	10	1	5	16	5	13	60	1	4	13	: 18	327	18.2	42
LOCK & DAM 2	1	6	111	1	6	42	4	8	18	1	9	48	744	35551	47.8	517
LOCK & DAM 2 AUXILIARY 1	M	DAT	RECO	MDED	FOR T	HIS L	.OCK									
LOCK & DAN 3	ı	6	114	1	5	40	4	5	28	1	9	104	770	28319	36.8	318
LOCK & DAM 4	1	7	105	1	6	44	2	5	30	1	10	50	741	32390	43.7	705
LOCK & DAM 5	1	5	104	1	6	70	4	7	17	1	10	64	506	26202	51.8	581
LOCK & DAM 6	1	7	80	i	6	40	1	5	14	1	10	54	: 589	23963	40.7	263
LOCK & DAM 7	1	5	80	1	5	43	4	5	18	1	8	51	903	33162	36.7	330
LOCK & DAM B	1	8	95	1	6	56	4	6	24	ı	13	74	: 435	25669	59.0	414
LOCK & DAM 9	1	8	81	1	6	42	2	6	47	1	12	101	: 295	17857	60.5	290
LOCK & DAM 10	1	7	119	1	6	51	4	6	11	1	11	63	: 607	30173	49.7	447
ST ANTHONY FALLS UPPER L & I	D 1	3	24	1	3	14	7	9	22	1	3	17	: 10	90	9.0	25
ST ANTHONY FALLS LONER L & 1) i	2	22	1	3	48	4	12	28	1	;	15	: 138	1961	14.2	152
LOCK & DAM SA	1	6	62	1	5	37	2	5	21	1	9	55	: 651	25996	46.1	691

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DISTRI	STRICT NAME	DIVISION NAME	MON	THS REPORTED	
PORTLA	RTLAND	NORTH PACIFIC	4/83	5/83	6/83
	LCODE-LOC	(NAME	LEN/WID/DRAFT	(FT/FT/FT)	
RIVER	01-BONNEY	ILLE LOCK & DAN	0500/0074/15.0		
	02-THE DAI	LLES DAM	0650/0084/15.0		
	03-JOHN DI	NY LOCK & DAM	0650/0084/15.0		
E RIVER	R II-WILLAM	ETTE FALLS LOCKS 1 - 4	0200/0037/ 6.5		
	15-WILLAM	ETTE FALLS GUARD LOCK	0200/0037/ 6.5		
	01-BONNEY 02-THE DAI 03-JOHN DA 11-WILLAN	ILLE LOCK & DAM LES DAM AY LOCK & DAM ETTE FALLS LOCKS 1 - 4	0500/0074/15.0 0650/0084/15.0 0650/0084/15.0 0200/0037/ 6.5	(FT/FT/FT)	

EROC 62	DISTRICT NAME PORTLAND			SION NAM	_			4/83		NTHS REF 5/83		6/	83	_
RIVER/LOCK	NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BAR6S EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S COMMER	RECRIN		LCKGES TOTAL ETC)	TONNAGE (KTONS)	
CO	LUMBIA RIVER													
BONNEVILLE	I DCK & DAM	**	•											
UPBOUND ST		201	67	25	293	462	189	651	398	46	65	509	240	
DOWNBOUND		214	94	16	324	46	634	680	432	47	52	531	1350	
TOTALS	•	415	161	41	617	508	823	1331	830	93	117	1040	1599	
THE DALLES	DAM	**	+											
UPBOUND ST	ATISTICS	167	17	4	188	352	171	523	178	13	18	209	240	
DOMNBOUND	STATISTICS	177	22	2	201	49	491	540	188	16	16	220	1157	
TOTALS		344	39	6	389	401	662	1063	366	29	34	429	1397	
JOHN DAY LO	CK & DAM	**	•											
UPBOUND ST	ATISTICS	164	38	8	210	341	179	520	174	10	20	212	252	
DOWNBOUND	STATISTICS	160	40	4	204	49	461	510	170	21	26	217	1117	
TOTALS		324	78	12	414	390	640	1030	344	39	46	429	1369	
Wi	LLAMETTE RIVER													
WILLAMETTE	FALLS LOCKS 1 - 4	#H	+ ONLY	THIRD MC	NTH REPO	RTED								
UPBOUND ST	ATISTICS	22	31	7	60	4	32	36	36	21	0	57	11	
DOMMBOUND	STATISTICS	21	36	4	61	1	35	36	32	24	0	56	10	
TOTALS		43	67	11	121	5	67	72	68	45	0	113	21	
WILLAMETTE	FALLS GUARD LOCK	61	. ONLY	THIRD NO	NTH REPO	RTED								
UPBOUND ST	ATISTICS	36	14	45	95	8	30	38	4	0	90	94	68	
DOMNEOUND	STATISTICS	39	18	40	97	2	37	39	3	0	88	91	12	
TOTALS		75	32	85	192	10	67	77	7	0	178	185	80	

ASSESSED VACACCE INVESTIGATION PRODUCES CONTINUES PROGUES PROG

EROC DISTRICT NAME			DI	VISION	NAME								MONTHS RE	PORTED		
62 PORTLAND			NO	RTH PA	CIFIC						4/83	;	5/8	3	6/	83
	MIN	APPRO AV6		: HIN	ENTRY		. (CHAMBE	(MIN.) ER MAX:		EXIT AV6	1	DELAYED VESSELS	TIME	DELAY AV6 MINUTES)	DELAY MAX
COLUMBIA RIVER																
BONNEVILLE LOCK & DAM	1	ь	33	1	4	93	2	21	84	1	4	70	528	34070	64.5	465
THE DALLES DAM	1	5	23	1	6	25	5	23	655	i	5	24	241	2727	11.3	80
JOHN DAY LOCK & DAM	1	4	25	1	5	30	5	25	58	i	5	16	424	2217	5.2	65
WILLAMETTE RIVER																
WILLAMETTE FALLS LOCKS 1 -	4 1	1	15	1	1	33	1	37	71	1	í	11 :	55	108	2.0	27
NILLAMETTE FALLS GUARD LOCK	ı	ı	2	1	4	600	1	4	600	1	4	600	118	174	1.5	51

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT NAME	DIVISION NAME	HO	NTHS REPORTED		
63	SEATTLE	NORTH PACIFIC	4/83	5/83	6/83	
RIVER	LCODE-LOCI	K NAME	LEN/WID/DRAFT	(FT/FT/FT)		
	HENDERN SHE SA AL HERAM I	4 ANTITECHDEN I BAVA	ABAA (AABA (TA A			

LAKE MASHINGTON SHP CA 01-HIRAM M CHITTENDEN LOCKS 0800/0080/30.0 01-HIRAM M CHITTENDEN LOCKS AUX1 0123/0030/25.0

EROC I	STRICT NAME		DIVI	SION NAM	ΙE				MO	NTHS REP	ORTED		
63 5	SEATTLE		NORT	H PACIFI	C			4/83	;	5/83	;	6/	83
RIVER/LOCK NAV	16	TOWS	VESSL Recrtn	VESSL OTHER	VESSL TOTAL	BARGS Empty	BAR6S FULL	BARGES TOTAL	LOCK6S Commer	LCKGES RECRTN (NAV	LCKGES OTHER , OPN, E	LCKGES TOTAL ETC)	TONNAGE (KTONS)
LAKE	Washington SHP	CA											
HIRAM N CHITTE	ENDEN LOCKS	#1	ł#										
UPBOUND STATE	ISTICS	272											
	-4.700	232	3939	364	4535	68	222	290	549	70	65	684	340
DOWNBOUND STA		252 258	3939 4153	364 535	4535 4946	68 194	222 114	290 308	549 649	70 84	65 70	684 803	340 134
DOWNBOUND STA													
TOTALS		258 490	4153	535	4946	194	114	308	649	84	70	803	134
TOTALS	ATISTICS ENDEN LOCKS AUX	258 490	4153 8092	535	4946	194	114	308	649	84	70	803	134
TOTALS HIRAN N CHITTE	ATISTICS ENDEN LOCKS AUX ISTICS	258 490	4153 8092	535 899	4946 9481	194 262	114 336	308 598	649 1198	84 154	70 135	803 1487	134 474

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EROC 63	DISTRICT NAME SEATTLE					N NAME ACIFIC						4/83	3	MONTHS RE 5/8		6/	83
		MIN	APPROA			ENTRY	1		CHAMBI	_		EXIT AV6	;	: DELAYED : VESSELS	TIME	DELAY AVG I MINUTES)	DELAY Max
	LAKE WASHINGTON S	HP CA															
HIRAM I	H CHITTENDEN LOCKS	1	2	19	1	4	43	2	10	66	1	6	71	: 1401	5 773	4.1	55
HIRAM I	M CHITTENDEN LOCKS A	UX 1	1	17	1	1	34	1	4	31	1	7	41	: 1719	7487	7 4.4	50

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	DISTRICT NAME	DIVISION NAME	··· ·	NTHS REPORTED	4 /57
64 1	WALLA WALLA	NORTH PACIFIC	4/83	5/83	6/83
RIVER	LCODE-LOC	K NAME	LEN/WID/DRAFT	(FT/FT/FT)	
SNAKE RIVER	•	RBOR LOCK & DAM	0651/0085/14.0	•	
OMME HELEN		MONUMENTAL LOCK & DAM	0651/0085/14.0)	
	•	600SE LOCK & DAM	0651/0085/14.0)	
		GRANITE LOCK & DAM	0651/0085/14.0)	
COLUMBIA RIVE		LOCK & DAM	0651/0085/14.0)	

ERDC DISTRICT NAME 64 WALLA WALLA			SION NAM	_			4/83		ONTHS REF 5/83		6/	83
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS Empty	BARGS Full	BARGES TOTAL		RECRIN		LCKGES TOTAL ETC)	TONNAGE (KTONS)
SNAKE RIVER												
ICE HARBOR LOCK & DAM		**										
UPBOUND STATISTICS	128	324	36	488	248	54	302	163	123	32	318	17
DOWNBOUND STATISTICS	143	312	22	477	8	295	303	165	118	32	315	745
TOTALS	271	636	58	965	256	349	605	328	241	64	633	762
LOWER MONUMENTAL LOCK & DAM		**										
UPBOUND STATISTICS	83	86	5	174	207	57	264	93	30	26	149	28
DOWNBOUND STATISTICS	84	91	1	176	5	257	262	92	37	30	159	632
TOTALS	167	177	6	350	212	314	526	185	67	56	208	660
LITTLE GOOSE LOCK & DAM		**										
UPBOUND STATISTICS	82	109	7	198	204	52	256	91	35	31	157	35
DOWNBOUND STATISTICS	84	99	2	185	6	257	263	93	38	35	166	628
TOTALS	166	20 8	9	383	210	309	519	184	73	66	252	992
LOWER GRANITE LOCK & DAM		**										
UPBOUND STATISTICS	76	132	9	217	132	49	181	89	82	8	179	15
DOWNBOUND STATISTICS	76	132	6	214	3	180	183	91	84	10	185	389
TOTALS	152	264	15	431	135	229	364	180	166	18	364	404
COLUMBIA RIVER												
HCNARY LDCK & DAM		**										
UPBOUND STATISTICS	144	89	6	239	300	178	478	156	44	31	231	244
DOWNBOUND STATISTICS	148	89	4	241	54	425	479	157	49	31	237	1039
TOTALS	292	178	10	480	354	603	957	313	93	62	468	1283

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PERFORMANCE MONITORING SYSTEM (FMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME 64 WALLA WALLA				IVISIO ORTH P							4/83		MONTHS REI 5/8		6/0	83
		APPRO AV6			ENTR) AVG	MAX	: MIN	CHAMBE AV6	MAX :	HIN		: : XAM	DELAYED VESSELS	TIME (IN	DELAY AV6 MINUTES)	DELAY Max
SMAKE RIVER																
ICE HARBOR LOCK & DAM	1	2	25	ı	4	34	11	26	50	1	3	17 :	425	2316	5.4	109
LOWER HONUMENTAL LOCK & DAM	1	3	17	2	5	26	11	23	37	1	3	11:	242	1175	4.9	75
LITTLE GOOSE LOCK & DAM	i	3	18	1	4	21	Ş	19	49	1	5	22 :	275	1310	4.8	35
LOWER GRANITE LOCK & DAM	i	3	25	i	4	19	8	12	33	1	3	11 :	365	1857	5.1	53
COLUMBIA RIVER																
HCNARY LOCK & DAM	i	4	19	1	5	30	É	16	3 5	1	Ь	19 :	414	2475	6.0	55

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EROC	DISTRICT NAME	DIVISION NAME	H	ONTHS REPORTED	
H1	HUNTINGTON	OHIO RIVER	4/83	5/83	6/83
RIVER	LCODE-LOCK	NAME	LEN/WID/DRAF	T (FT/FT/FT)	
KANANHA RIVE	R 01-WINFIELD	LOCKS & DAM MAIN 1	0360/0056/15.	0	
	01-WINFIELD	LOCKS & DAM MAIN 2	0360/0056/15.	0	
	02-MARMET L	OCKS & DAM MAIN 1	0360/0056/15.	0	
	02-MARMET L	OCKS & DAM MAIN 2	0360/0056/15.	0	
	03-LONDON L	DCKS & DAM MAIN 1	0360/0056/15.	0	
	03-LONDON L	OCKS & DAM MAIN 2	0360/0056/15.	0	
OHIO RIVER	21-BELLEVIL	LE LOCKS & DAM	1200/0110/12.	0	
	21-BELLEVIL	LE LOCKS & DAM AUX 1	0600/0110/12.	0	
	22-RACINE L	DCKS & DAM	1200/0110/12.	0	
	22-RACINE L	OCKS & DAM AUX 1	0600/0110/12.	0	
	23-6ALLIPOL	IS LOCKS & DAM	0600/0110/12.	0	
	23-GALLIPOL	IS LOCKS & DAN AUX 1	0360/0110/12.	0	
	24-GREENUP	LOCKS & DAM	1200/0110/12.	0	
	24-GREENUP	LOCKS & DAM AUX 1	0600/0110/12.	0	
	25-CAPT ANT	MELDAHL LOCKS & DAM	1200/0110/12.	0	
	25-CAPT ANT	MELDAHL LK&DAN AUX 1	0600/0110/12.	0	
	72-WILLOW 1	SLAND LOCKS & DAM	1200/0110/12.	0	
	72-WILLOW 1	SLAND LOCKS & DAM AUX	0600/0110/12.	0	

TOWS VESSL VESSL VESSL BARGS BARGS BARGES LOCKGS RECRTN OTHER TOTAL EMPTY FULL TOTAL COMMER	RECRTN		TOTAL	TONNAGE (KTONS)
MINFIELD LOCKS & DAM MAIN 1 UPBOUND STATISTICS	24	-	010	074
UPBOUND STATISTICS 254 11 11 276 804 683 1487 889 DOWNBOUND STATISTICS 248 9 11 268 298 1251 1549 904 TOTALS 502 20 22 544 1102 1934 3036 1793 MINFIELD LOCKS & DAM MAIN 2 **** **** UPBOUND STATISTICS 218 20 11 249 891 294 1185 669 DOWNBDUND STATISTICS 219 24 19 262 534 622 1156 692 TOTALS 437 44 30 511 1425 916 2341 1361 MARMET LOCKS & DAM MAIN 1 **** **** UPBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 **** **** ****	24	-	010	074
UPBOUND STATISTICS 254 11 11 276 804 683 1487 889	24	-	010	674
DOWNBOUND STATISTICS 248 9	24	-		
TOTALS 502 20 22 544 1102 1934 3036 1793 MINFIELD LOCKS & DAM MAIN 2 *** UPBOUND STATISTICS 218 20 11 249 891 294 1185 669 DOWNBOUND STATISTICS 219 24 19 262 534 622 1156 692 TOTALS 437 44 30 511 1425 916 2341 1361 MARMET LOCKS & DAM MAIN 1 *** UPBOUND STATISTICS 158 41 99 298 636 89 725 488 DOWNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 *** UPBOUND STATISTICS 142 101 36 279 520 61 581 348			931	1381
#INFIELD LOCKS & DAM MAIN 2 ### UPBOUND STATISTICS 218 20 11 249 891 294 1185 669 DUMNBOUND STATISTICS 219 24 19 262 534 622 1156 692 TOTALS 437 44 30 511 1425 916 2341 1361 MARMET LOCKS & DAM MAIN 1 ### UPBOUND STATISTICS 158 41 99 298 636 89 725 488 DUMNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 ### UPBOUND STATISTICS 142 101 36 279 520 61 581 348	٠.	6	1850	2312
UPBOUND STATISTICS 218 20 11 249 891 294 1185 669 DOWNBOUND STATISTICS 219 24 19 262 534 622 1156 692 TOTALS 437 44 30 511 1425 916 2341 1361 MARMET LOCKS & DAM MAIN 1 **** **** UPBOUND STATISTICS 158 41 99 298 636 89 725 488 DOWNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 UPBOUND STATISTICS 142 101 36 279 520 61 581 348			1000	2012
DOWNBOUND STATISTICS 219 24 19 262 534 622 1156 692				
TOTALS 437 44 30 511 1425 916 2341 1361 MARMET LOCKS & DAM MAIN 1 **** UPBOUND STATISTICS 158 41 99 298 636 89 725 488 DOWNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 *** UPBOUND STATISTICS 142 101 36 279 520 61 581 348	35	8	712	395
MARMET LOCKS & DAM MAIN 1 ### UPBOUND STATISTICS 158 41 99 298 636 89 725 488 DOWNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 ### UPBOUND STATISTICS 142 101 36 279 520 61 581 348	43	11	746	697
UPBOUND STATISTICS 158 41 99 298 636 89 725 488 DOWNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM HAIN 2 **** UPBOUND STATISTICS 142 101 36 279 520 61 581 348	78	19	1458	1092
UPBOUND STATISTICS 158 41 99 298 636 89 725 488 DOWNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 84 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 **** UPBOUND STATISTICS 142 101 36 279 520 61 581 348				
DOWNBOUND STATISTICS 191 43 11 245 72 874 946 616 TOTALS 349 B4 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 **** UPBOUND STATISTICS 142 101 36 279 520 61 581 348				
TOTALS 349 B4 110 543 708 963 1671 1104 MARMET LOCKS & DAM MAIN 2 *** UPBOUND STATISTICS 142 101 36 279 520 61 581 348	84	5	577	130
MARMET LOCKS & DAM MAIN 2 *** UPBOUND STATISTICS 142 101 36 279 520 61 581 348	94	6	716	1061
UPBOUND STATISTICS 142 101 36 279 520 61 581 348	178	11	1293	1191
UPBOUND STATISTICS 142 101 36 279 520 61 581 348				
		_		
	126	3	477	62
DOWNBOUND STATISTICS 113 101 33 247 73 302 375 247	103	3	353	345
TOTALS 255 202 69 \$26 593 363 956 595	229	6	B 30	407
LONDON LOCKS & DAM MAIN 1 ***				
UPBOUND STATISTICS 53 10 10 73 134 15 149 106	13	Ú	119	12
DOWNBOUND STATISTICS 50 7 7 64 5 122 127 94	11	0	105	139
TOTALS 103 17 17 137 139 137 276 200	24	0	224	151
105 17 17 157 157 276 200	27	4	224	IJ
LONDON LOCKS & DAM MAIN 2 544				
UPBOUND STATISTICS 78 11 18 107 185 4 189 138	14	2	154	3
DOWNBOUND STATISTICS 95 5 8 108 13 208 221 149	7	2	158	233
TOTALS 173 16 26 215 198 212 410 287	21	4	312	234
OHIO RIVER				
BELLEVILLE LOCKS & DAM ***				
UPBOUND STATISTICS 383 4 4 391 967 2932 3899 385	2	0	387	4280
DOWNBOUND STATISTICS 350 2 6 358 1621 2121 3742 354	0	ŏ	354	3154
TOTALS 733 6 10 749 2588 5053 7641 739	2	Ô	741	7434

EROC	DISTRICT NAME		DIVI	SION NAM	ΙE				MO	INTHS REP	ORTED		
HL 	HUNTINGTON		OHIO	RIVER			_	4/83	\$	5/83	;	6/	83
IVER/LOCK	NAME	TOWS	VESSL RECRTN		VESSL TOTAL	BARGS Empty	BAR6S Full	BARGES TOTAL		RECRTN		TOTAL	TONNAGE (KTONS)
			•••••										
ОН	IO RIVER												
ELLEVILLE	LOCKS & DAM AUX 1	**	11										
UPBOUND ST	ATISTICS	24	60	4	88	26	48	74	31	42	2	75	38
DOWNBOUND	STATISTICS	53	61	4	118	116	53	169	58	46	4	108	58
TOTALS		77	121	8	206	142	101	243	89	88	6	183	96
ACTHE LOCK	S & DAM	+	11										
UPBOUND ST	ATISTICS	418	0	6	424	1267	2924	4191	418	0	3	421	4235
DONNBOUND	STATISTICS	403	0	11	414	1660	2461	4121	406	0	1	407	3403
TOTALS		821	0	17	838	2927	5385	8312	824	0	4	828	7638
ACINE LOCK	S & DAM AUX 1	#1											
UPBOUND ST	ATISTICS	38	44	1	83	112	24	136	44	26	0	70	35
DOWNBOUND	STATISTICS	41	46	4	91	67	64	131	48	30	2	80	64
TOTALS		79	90	5	174	179	88	267	92	56	2	150	99
ALLIPOLIS	LOCKS & DAM	61	i 4										
UPBOUND ST	ATISTICS	423	3	18	444	975	3010	3985	739	3	0	742	4397
DOWNBOUND	STATISTICS	405	1	21	427	1867	2124	3991	714	1	0	715	3031
TOTALS		828	4	39	871	2842	5134	7976	1453	4	0	1457	7428
ALLIPOLIS	LOCKS & DAM AUX 1	#1	14										
UPBOUND ST		32	45	22	99	45	33	78	59	34	2	95	53
DOWNBOUND	STATISTICS	45	54	33	132	51	111	162	90	37	2	129	142
TOTALS		77	99	55	231	96	144	240	149	71	4	224	195
REENUP LOC	KS & DAN	#1	i t										
UPBOUND ST	ATISTICS	450	0	10	460	2721	1412	4133	460	0	0	460	2134
DOWNBOUND	STATISTICS	450	0	8	458	749	3542	4291	459	0	0	459	5282
TOTALS		900	0	18	918	3470	4954	8424	919	0	0	919	7416
REENUP LOC	KS & DAM AUX 1	#1	: •										
UPBOUND ST	ATISTICS	54	195	16	265	98	24	122	71	139	1	211	27
DOWNBOUND	STATISTICS	47	166	38	251	61	45	106	88	129	1	218	68
TOTALS		101	361	54	516	159	69	228	159	268	2	429	95

STATE OF SECURITIES AND ASSESSED FOR THE SECURITIES ASSESSED FOR THE SECURITIES AND ASSESSED FOR THE SECURITIES ASSESSED FOR THE SECURITIE

ROC DISTRICT NAME				SION NAM RIVER	E			4/83		NTHS REP 5/83		6/	83
RIVER/LOCK	NAME	TONS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S Commer	RECRIN		LCKGES TOTAL ETC)	TONNAGE (KTONS)
OH	IO RIVER												
CAPT ANT ME	LDAHL LOCKS & DAM	•	##										
UPBOUND ST	ATISTICS	438	1	8	447	2375	1800	4175	443	1	2	446	2840
DOWNBOUND	STATISTICS	430	1	10	441	747	3443	4190	434	0	Ú	434	5195
TOTALS		868	2	18	888	3122	5243	8365	977	1	2	880	8035
CAPT ANT ME	LDAHL LK&DAM AUX 1	•	F +										
UPBOUND ST	ATISTICS	16	323	t	340	28	14	42	19	141	1	161	21
DOWNBOUND	STATISTICS	21	292	3	316	41	14	55	26	143	3	172	19
TOTALS		37	615	4	656	69	28	97	45	284	4	232	40
WILLOW ISLA	ND LOCKS & DAM	84	11										
UPBOUND ST	ATISTICS	373	10	5	388	1050	2615	3665	375	6	0	381	3575
DOWNBOUND	STATISTICS	355	3	5	363	1442	2133	3575	357	1	ò	358	3069
TOTALS		728	13	10	751	2492	4748	7240	732	7	0	739	6644
WILLOW ISLA	ND LOCKS & DAM AUX	51	•										
UPBOUND ST	ATISTICS	70	72	13	155	142	67	209	92	38	2	132	96
DOWNBOUND	STATISTICS	83	75	10	168	87	174	261	106	34	2	142	120
TOTALS		153	147	23	323	229	241	470	198	72	Ā	274	216

ROC DISTRICT NAME IL HUNTINGTON			0H	/ISION IO RIV	ER						4/83		MONTHS RE 5/8	3	6/1	
	MIN	APPRO AV6	ACH Max	: MIN	LOCK ENTRY AV6	PROCE:	SSING (HIN	TINE HAMBE AVG	(MIN.) R MAX:	MIN	EXIT AVG	MAX :	DELAYED VESSELS	DELAY TIME (IN	DELAY AVG MINUTES)	DELAY MAX
KANANHA RIVER																
SINFIELD LOCKS & DAM MAIN 1	1	10	100	1	4	76	5	9	40	1	11	45 :	274	33124	120.9	575
INFIELD LOCKS & DAM HAIN 2	1	9	68	1	4	20	5	9	28	ī	11	117	206	20546	99.7	450
IARHET LOCKS & DAM MAIN 1	1	9	72 [.]	1	4	18	5	8	20	1	9	65	49	3571	72.9	198
IARNET LOCKS & DAM MAIN 2	1	8	55	1	4	63	5	8	20	1	7	76	: 38	2585	68.0	286
ONDON LOCKS & DAM MAIN 1	1	8	51	1	5	17	5	12	26	1	7	21	: 49	6820	139.2	591
ONDON LOCKS & DAM MAIN 2	i	9	57	1	4	20	5	10	28	2	7	113	: 44	7867	178.8	541
OHIO RIVER																
ELLEVILLE LOCKS & DAM	1	19	57	1	8	25	ь	12	72	2	9	30	238	9705	40.8	135
ELLEVILLE LOCKS & DAM AUX	1 1	12	56	ı	3	11	7	12	34	1	4	17	: 14	145	10.4	20
ACINE LOCKS & DAM	i	16	85	2	10	37	5	10	44	2	9	47	: 248	12868	51.9	483
ACINE LOCKS & DAM AUX 1	1	11	66	2	5	20	7	10	18	1	6	23	: 9	233	25.9	75
MALLIPOLIS LOCKS & DAM	1	11	105	1	11	60	5	10	39	1	18	85	: 601	122535	203.9	1565
MALLIPOLIS LOCKS & DAM AUX	1 1	7	56	1	6	28	5	11	22	1	7	65	: 25	1424	57.0	393
REENUP LOCKS & DAM	1	15	53	1	9	33	7	10	23	2	9	22	: 249	8701	34.9	243
REEMUP LOCKS & DAM AUX 1	1	7	45	1	4	10	1	10	20	ı	4	15	: 54	606	11.2	. 60
CAPT ANT NELDANL LOCKS & DAI	H 1	20	58	1	10	28	5	13	38	1	10	27	: 339	19542	57.6	335

EROC H1	DISTRICT NAME Huntington				ISION O RIV	NAME IER						4/83		Ħ	ONTHS RE 5/8		6/1	83	
			APPRO AV6			ENTRY	'	CI	HAMBE	(MIN.) R MAX:		EXIT AV6	MAX	:	DELAYED VESSELS	TIME	DELAY AVG MINUTES)	DELAY MAX	
	OHIO RIVER																		
CAPT ANT	MELDAHL LKEDAM AUX	1	6	38	1	2	13	5	12	33	1	3	15	:	5	137	27.4	76	,
WILLOW IS	SLAND LOCKS & DAM	1	16	49	1	8	25	6	13	30	2	8	37	:	211	7947	37.7	198	<u> </u>
WILLOW 19	SLAND LOCKS & DAM AU	j 1	12	43	i	3	19	5	13	28	1	4	17	:	34	511	15.0	61	t

EROC	DISTRICT NAME	DIVISION NAME	MON	THS REPORTED	
H2	LOUISVILLE	OHIO RIVER	4/83	5/83	6/83
RIVER	LCODE-LOC	:k name	LEN/WID/DRAFT	(FT/FT/FT)	
GREEN/BARRE	N RIVER 21-LOCK &	DAM 1	0600/0084/12.0		
	22-LOCK \$	DAN 2	0600/0084/12.0		
	23-LOCK &	i DAM 3	0138/0036/12.0		
OHIO RIVER	41-MARKLA	AND LOCKS & DAM	1200/0110/12.0		
	41-HARKLA	AND LOCKS & DAM AUX 1	0600/0110/12.0		
	42-MCALP	INE LOCKS & DAM	1200/0110/12.0		
	42-MCALPI	INE LOCKS & DAM AUX 1	0600/0110/12.0		
	50-LOCK 4	DAM 50	0600/0110/12.0		
	51-LOCK 8	2 DAM 51	9609 /0110/12.0		
	52-LOCK 8	L DAM 52	1200/0110/12.0		
	52-LOCK 8	L DAM 52 AUX 1	0600/0110/12.0		
	53-LOCK I	k DAM 53	0600/0110/12.0		
	75-CANNEL	TON LOCK & DAM	1200/0110/12.0		
	75-CANNEL	LTON LOCK & DAM AUX	0600/0110/12.0		
	76-NEWBUI	RGH LDCK & DAM	1200/0110/12.0		
	76-NEWBUI	RGH LOCK & DAM AUX 1	0600/0110/12.0		
	77-UNION	TOWN LOCK & DAM	1200/0110/12.0		
	77-UNION	TOWN LOCK & DAM AUX 1	0600/0110/12.0		
	78-SMITH	LAND LOCK & DAM	1200/0110/12.0		
	78-SMITH	LAND LOCK & DAM AUX 1	1200/0110/12.0		

EROC DISTRICT NAME H2 LOUISVILLE		DHIC	(SION NAME) RIVER				4/83	5	NTHS REP 5/83	;		83
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL	VESSL TOTAL	BARGS Empty	BARGS	BARGES TOTAL	LOCK6S	LCKGES RECRTN	LCKGES	LCKGES TOTAL	TONNAGE (KTDNS)
GREEN/BARREN RIVER	ì											
LOCK & DAM 1	#1											
UPBOUND STATISTICS	443	36	18	497	1372	205	1577	228	35	246	509	307
DOWNBOUND STATISTICS	437	39	17	493	64	1465	1529	228	38	234	500	2197
TOTALS	880	75	35	990	1436	1670	3106	456	73	480	1009	2504
OCK & DAN 2	**	+										
UPBOUND STATISTICS	349	19	4	372	1230	10	1240	212	18	143	373	15
DOWNBOUND STATISTICS	33B	20	7	365	8	1188	1196	205	20	140	365	1795
TOTALS	687	39	11	737	1238	1198	2436	417	38	283	738	1810
LOCK & BAN 3	NO DA	TA RECOR	RDED FOR	THIS LOC	CK							
OHIO RIVER												
MARKLAND LOCKS & DAM	#1	+ ONLY	FIRST AN	SECONI) MONTHS	REPORTED						
UPBOUND STATISTICS	205	2	4	211	1019	872	1891	210	2	Û	212	1425
DOWNBOUND STATISTICS	199	1		200	435	1458	1893	201	0	0	201	2240
TOTALS	404	3	4	411	1454	2330	3784	411	2	0	413	3665
MARKLAND LOCKS & DAM AUX 1	41	H#										
UPBOUND STATISTICS	280	5 3	8	341	1196	1227	2423	446	43	4	493	1916
DOWNBOUND STATISTICS	293	65	8	366	846	1807	2653	477	55	3	535	2764
TOTALS	573	118	16	707	2042	3034	5076	923	98	7	1028	4680
MCALPINE LOCKS & DAM	#1	i#										
UPBOUND STATISTICS	514	148	57	719	1597	2765	4362	563	56	11	6 30	4395
DOWNBOUND STATISTICS	514	151	66	731	1481	2997	447B	568	72	10	650	4608
TOTALS	1028	299	123	1450	3078	5762	8840	1131	128	21	1280	9003
MEALPINE LOCKS & DAM AUX 1	NO DA	ATA RECOI	RDED FOR	THIS LO	CK							

EROC H2	DISTRICT NAME LOUISVILLE			ISION NA O RIVER	ME			4/83		ONTHS REP 5/83		6/	83
RIVER/LOC	K NAME	TOWS	VESSL Recrtn	VESSL OTHER	VESSL Total	BARGS Empty	BARGS Full	BARGES Total		RECRYN		TOTAL	TONNAGE (KTONS)
	 OHIO RIVER												
LOCK & DA	M 50	NO DA	ATA RECOF	RDED FOR	THIS LOCK	(
LOCK & DA	M 51	NO D	ATA RECOI	RDED FOR	THIS LOC	K							
LOCK & DA	M 52	# 1	:										
	STATISTICS	898	0	105	1003	4137	3604	7741	0	0	963	963	5846
	D STATISTICS	930	0	79	1009	2043	5746	7789	0	0	1006	1006	8472
TOTALS		1828	0	184	2012	6180	9350	15530	0	0	1969	1969	14318
LOCK & DA	M 52 AUX 1	NO DA	ATA RECOF	RDED FOR	THIS LOC	K							
LOCK & DA	M 53	NO D	ATA RECOF	RDED FOR	THIS LOC	K							
CANNELTON	LOCK & DAM	#-	••										
UPBOUND	STATISTICS	495	10	10	515	1672	2864	4536	504	5	2	511	4530
DOWNBOUN	ID STATISTICS	505	23	9	537	1537	3242	4779	515	8	0	523	4692
TOTALS		1000	33	19	1052	3209	6106	9315	1019	13	2	1034	9222
CANNELTON	I LOCK & DAM AUX		**										
UPBOUND	STATISTICS	9	96	5	110	30	1	31	15	42	0	57	1
DOWNBOUN	ID STATISTICS	7	101	8	116	4	13	17	15	45	2	62	14
TOTALS		16	197	13	226	34	14	48	30	87	2	119	15
NEWBURGH	LOCK & DAM		* *										
UPBOUND	STATISTICS	564	149	59	772	2416	2544	4960	546	52	35	633	4162
DONNBOUN	D STATISTICS	591	158	49	7 98	1362	3852	5214	575	52	37	664	5472
TOTALS		1155	307	108	1570	3778	6396	10174	1121	104	72	1297	9634
NEWBURGH	LOCK & DAM AUX 1		**										
UPBOUND	STATISTICS	24	256	21	301	34	5	39	36	101	1	138	7
DOWNBOUN	ID STATISTICS	17	258	15	290	20	11	31	27	111	0	138	12
TOTALS		41	514	36	591	54	16	70	63	212	1	276	19

EROC	DISTRICT NAME		DIVI	SIDN NAP	1E				MC	INTHS REF	ORTED		
H2	LOUISVILLE		01110	RIVER				4/8	3	5/83	3	6/	43
RIVER/LOC	K NANE	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS Full	BARGES TOTAL	LOCK6S Commer	RECRIN	LCKSES OTHER), OPN, I	TOTAL	TONNAGE (KTONS)
	OHIO RIVER												
UNIONTOWN	LOCK & DAM	# !	••										
UPBOUND	STATISTICS	581	4	5	590	3708	2110	5818	539	3	48	590	3527
DOWNBOUN	D STATISTICS	598	5	9	612	1005	4957	5962	561	4	47	612	7498
TOTALS		1179	9	14	1202	4713	7067	11780	1100	7	95	1202	11025
UNIONTOWN	LOCK & DAM AUX 1	#	* +										
UPBOUND	STATISTICS	31	141	22	194	34	12	46	54	140	1	195	18
DOWNBOUN	O STATISTICS	20	150	16	186	19	32	51	38	149	ı	188	42
TOTALS		51	291	38	380	53	44	97	92	289	2	383	60
SHITHLANI	D LBCK & DAM	*	+ +										
UPBOUND	STATISTICS	99	10	14	123	513	271	784	113	9	8	130	479
DOMNBOU	D STATISTICS	673	31	20	724	858	5512	6370	695	28	9	732	8366
TOTALS		772	41	34	847	1371	5783	7154	808	37	17	862	8845
SMITHLAND	D LOCK & DAM AUX 1	+	**										
UPBOUND	STATISTICS	646	23	24	693	4187	1893	6080	671	22	7	700	3149
DOWNBOU	ND STATISTICS	67	6	12	85	103	503	696	82	5	2	89	788
TOTALS		713	29	36	778	4290	2396	6686	753	27	9	789	3937

EROC DISTRICT H2 LOUISVCII					/ISIO	N NAME Er						4/83		M	IONTHS RE 5/83		6/8	
		•	APPRO			ENTRY	1	(CHAMBE	(MIN.) R MAX:		EXIT AV6		:	DELAYED VESSELS	DELAY TIME	DELAY AV6 MINUTES)	DELAY MAX
GREEN/BARREN	RIVER																	
LOCK & DAM 1		1	3	61	1	2	10	1	4	107	1	3	32	:	80	1933	24.2	290
LOCK & DAM 2		1	3	29	1	2	30	1	6	85	1	5	18	:	68	1124	16.5	70
LOCK & DAN 3		NE	DAT	A RECO	RDED	FOR 1	HIS L	.OCK										
OHIO RIVER																		
MARKLAND LOCKS & DAM		1	20	84	1	8	30	5	13	50	1	9	80	:	213	17727	93.2	1215
MARKLAND LOCKS & DAM (AUX 1	i	12	105	1	9	40	5	12	46	1	18	95	:	535	125036	233.7	1266
MCALPINE LOCKS & DAM		1	16	99	1	7	30	5	10	30	1	6	36	:	606	21063	34.8	235
MCALPINE LOCKS & DAM (AUX 1	N	DAT	A RECO	RDED	FOR T	HIS I	OCK										
LOCK & DAM 50		N	DAT	A RECO	RDED	FOR 1	HIS I	OCK										
LOCK & DAN 51		N	DAT	A RECO	RDED	FOR 1	HIS (-OCK										
LOCK & DAM 52		1	3	48	1	1	9	1	1	10	1	3	28	:	2	51	25.5	50
LOCK & DAM 52 AUX 1		N	DAT	A RECO	RDED	FOR 1	HIS L	.OCK										
LOCK & DAN 53		N	DAT	A RECO	RDED	FOR 1	HIS L	.OCK										
CANNELTON LOCK & DAM		i	25	105	1	7	180	5	10	70	1	7	50	:	437	24332	55.7	813

EROC DISTRICT NAME H2 LOUISVILLE				/ISION IO RIV							4/8		MONTHS RE 5/8		6/	93
	MIN	APPRO AVG			ENTRY		(CHAMBI			EXIT AVG	: : : Max		TIME	DELAY AVG MINUTES)	DELAY MAX
OHIO RIVER																
CANNELTON LOCK & DAM AUX	1	10	55	1	3	10	5	10	30	1	3	12 :	17	198	11.6	30
NENBURGH LOCK & DAM	1	12	70	i	6	20	1	9	25	i	8	36 :	504	15082	29.9	141
NEWBURGH LOCK & DAM AUX 1	1	5	29	1	2	15	5	8	25	i	3	15 :	60	423	7.1	25
UNIONTOWN LOCK & DAM	1	16	90	1	6	30	ı	7	30	1	6	65 :	414	15478	37.4	197
UNIONTOWN LOCK & DAN AUX 1	1	5	38	1	2	18	5	7	30	1	2	13 :	60	493	8.2	34
SMITHLAND LOCK & DAM	í	15	80	i	8	25	5	8	50	1	7	65 :	160	2671	16.7	115
SMITHLAND LOCK & DAM AUX 1	1	12	85	1	8	25	5	8	70	1	7	20 :	114	1458	12.8	40

EROC	DISTRICT	NAME	DIVISION NAME	MON	ITHS REPORTED	
H3	NASHVILL	E 	OHIO RIVER	4/83	5/83	6/83
RIVER		LCODE-LOCK	NAME	LEN/WID/DRAFT	(FT/FT/FT)	
TENNESSEE R	IVER	01-KENTUCK	Y LOCK	0600/0110/11.0		
		02-PICKWIC	K LANDING LOCK	1000/0110/11.0		
		02-PICKWIC	K LANDING LOCK AUX	0600/0110/11.0		
		03-WILSON	LOCK	0600/0110/11.0		
		03-WILSON	LOCK AUX	0292/0060/11.0		
		04-GEN JOS	WHEELER LOCK	0600/0110/11.0		
		04-GEN JOS	WHEELER LK AUX1	0400/0060/11.0		
		05-GUNTERS	VILLE LOCK	0600/0110/11.0		
		05-GUNTERS	VILLE LOCK AUX 1	0360/0060/11.0		
		06-NICKAJA	C FOCK	0600/0110/11.0		
		07-CHICKAM	AUGA LOCK	0360/0060/11.0		
		08-WATTS B	AR LOCK	0360/0060/11.0		
		09-FORT LO	UDON LOCK	0360/0060/11.0		
CLINCH RIVE	R	11-MELTON 1	HILL LOCK	0400/0075/11.0		
CUMBERLAND	RIVER	21-BARKLEY	LOCK	0800/0110/11.0		
		22-CHEATHA	N LOCK	0800/0110/11.0		
		23-CORDELL	HULL LOCK	0400/0084/11.0		
		24-OLD HICK	KORY LOCK	0400/0084/11.0		

EROC H3	DISTRICT NAME NASHVILLE	DIVISION NAME OHIO RIVER							MC S	NTHS REI		6/	83
RIVER/LOCK N	IAME	TOWS	VESSL RECRIN	VESSL	VESSL TOTAL	BARGS ENPTY	BARGS Full			LCK6ES	LCK6ES		TONNAGE (KTONS)
				O111LN							v, OPN, í		
TEN	MESSEE RIVER												
KENTUCKY LOC	צצ	**											
UPBOUND STA		414	· 55	35	504	522	3096	3618	645	58	4	707	4603
DOWNBOUND S		369	36	40	445	2437	729	3166	579	42	2	623	991
TOTALS		783	91	75	949	2959	3825	6784	1224	100	6	1330	5594
PICKWICK LAN	IDING FOCK	**											
UPBOUND STA	ATISTICS	263	78	14	355	289	2249	2537	419	90	9	518	3297
DOWNBOUND S	STATISTICS	254	93	29	376	2061	441	2502	405	109	10	524	623
TOTALS		517	171	43	731	2349	2690	5039	824	199	19	1042	3920
PICKWICK LAP	NDING LOCK AUX	NO DA	TA RECO	RDED FOR	THIS LOC	K							
WILSON LOCK		**											
UPBOUND STA	ATISTICS	103	107	38	248	188	755	943	163	100	4	267	1103
DOWNBOUND S	STATISTICS	102	119	44	265	605	298	903	164	110	5	279	414
TOTALS		205	226	82	513	793	1053	1846	327	210	9	546	1517
WILSON LOCK	AUX	**	# ONLY	FIRST M	ONTH REPO	RTED							
UPBOUND STA	ATISTICS	33	2	14	49	104	191	295	264	14	43	321	271
DONNBOUND S	STATISTICS	28	9	12	49	126	89	215	178	42	26	246	122
TOTALS		61	11	26	98	230	280	510	442	56	69	567	393
GEN JOS WHEE		**	ŧ										
UPBOUND STA	ATISTICS	122	57	4	183	265	864	1129	180	55	8	243	1251
DOWNBOUND S	STATISTICS	112	75	5	192	652	338	990	157	68	6	231	465
TOTALS		234	132	9	375	917	1202	2119	337	123	14	474	1716
GEN JOS WHEL	ELER LK AUXI	. **	• ONLY	SECOND	AND THIRD	MONTHS	REPORTED						
UPBOUND ST	ATISTICS	0	148	0	148	0	0	0	0	101	0	101	0
DOWNBOUND S	STATISTICS	0	178	2	180	0	0	Û	2	105	1	108	0
TOTALS		0	326	2	32 8	0	0	0	2	206	1	209	0

EROC DISTRICT N H3 NASHVILLE	AME			SION NAM	E			4/83		INTHS REF 5/83		6/	83
RIVER/LOCK NAME		TOWS	VESSL Recrtn	VESSL OTHER	VESSL Total	BARGS EMPTY	BARGS Full	BARGES TOTAL	LOCKGS Commer	RECRTN		TOTAL	TONNAGE (KTONS)
TENNESSEE RIVE	R												
GUNTERSVILLE LOCK		41	F #										
UPBOUND STATISTICS		128	523	2	653	329	711	1040	156	217	6	379	1022
DOWNBOUND STATISTICS		119	525	9	653	562	405	967	147	226	4	377	549
TOTALS		247	1048	11	1306	891	1116	2007	303	443	10	756	1571
GUNTERSVILLE LOCK	AUX 1	#	••										
UPBOUND STATISTICS		0	147	0	147	0	0	0	3	114	0	117	0
DOWNBOUND STATISTICS		0	158	1	159	0	0	0	1	106	1	108	0
TOTALS		0	305	1	306	0	0	0	4	220	1	225	0
NICKAJAC LOCK		*	**										
UPBOUND STATISTICS		139	63	8	210	333	518	851	169	54	5	228	667
DOWNBOUND STATISTICS		134	76	15	225	443	382	825	169	66	4	239	523
TOTALS		273	139	23	435	776	900	1676	32 8	120	9	467	1190
CHICKAMAUGA LOCK			**										
UPBOUND STATISTICS		54	401	10	465	85	153	238	129	242	19	390	211
DOWNBOUND STATISTICS		49	412	14	475	135	107	242	125	263	19	407	146
TOTALS		103	813	24	940	220	260	480	254	505	38	797	357
WATTS BAR LOCK			**										
UPBOUND STATISTICS		32	309	2	343	72	43	115	45	278	14	337	70
DOWNBOUND STATISTICS		29	307	3	339	19	97	116	43	277	14	334	124
TOTALS		61	616	5	682	91	140	231	88	555	28	671	194
FORT LOUDON LOCK			**										
UPBOUND STATISTICS		20	160	5	185	12	27	39	30	112	8	150	48
DOWNBOUND STATISTICS		16	210	7	233	17	17	34	25	139	10	174	21
TOTALS		36	370	12	418	29	44	73	55	251	18	324	69
MELTON HILL LOCK			**										
UPBOUND STATISTICS		0	26	0	26	0	0	0	2	23	1	26	0
DOWNBOUND STATISTICS		0	33	0	33	0	0	0	0	26	i	27	0
TOTALS		0	59	0	59	0	0	0	2	49	2	53	0

EROC K3	DISTRICT NAME NASHVILLE			SION NAM	Œ			4/83		NTHS REF 5/83		A.	183
	MAGIN ILLL								, 				
RIVER/LOC	CK NAME	TOWS	VESSL Recrtn	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S COMMER	RECRIN		TOTAL	TONNAGE (KTONS)
	CLINCH RIVER												
BARKLEY L	-OCK	+											
UPBOUND	STATISTICS	38	64	4	106	22	262	284	41	46	1	88	389
DOWNBOUN	O STATISTICS	69	101	3	173	592	22	614	83	69	3	155	28
TOTALS		107	165	7	279	614	284	898	124	115	4	243	417
	CUMBERLAND RIVER												
CHEATHAM	LOCK	4-	••										
UPBOUND	STATISTICS	102	60	5	167	51	510	561	112	50	4	166	802
DOWNBOUN	O STATISTICS	97	62	6	165	471	49	520	106	51	7	164	68
TOTALS		199	122	11	332	522	559	1081	218	101	11	220	870
CORDELL H	MILL FOCK	NO D	ATA RECOF	DED FOR	THIS LOC	K							
OLD HICKO	ORY LOCK	f :	f f										
UPBOUND	STATISTICS	23	254	8	285	1	38	39	34	179	13	225	71
DOWNBOUN	O STATISTICS	19	229	10	258	31	i	32	30	188	12	230	1
TOTALS		42	483	18	543	32	39	71	64	366	25	455	72

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED NASHVILLE H3 OHIO RIVER 4/83 5/83 6/83 LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY ENTRY CHAMBER EXIT : VESSELS TIME AVG DELAY APPROACH MAX MIN AV6 MAX : MIN AV6 MAX : MIN AV6 MAX : MIN AV6 MAX : (IN MINUTES) TENNESSEE RIVER KENTUCKY LOCK 9 118 1 15 70: 82671 145.B 838 PICKWICK LANDING LOCK 15 249 : 302 36549 121.0 2423 PICKWICK LANDING LOCK AUX NO DATA RECORDED FOR THIS LOCK WILSON LOCK 50 1 12 86: 43868 274.2 4290 10 23 110 160 WILSON LOCK AUX 10 241 108 12 116: 116303 1368.3 3802 35 GEN JOS WHEELER LOCK 1 12 201 15 265: 4220 49.1 233 2 11 44 42 86 GEN JOS WHEELER LK AUX 1 7 13 23 4 15: 72 1567 21.8 115 41 **GUNTERSVILLE LOCK** 9025 6 110 14 132 64 : 295 30.6 231 40 **GUNTERSVILLE LOCK** AUX 1 18 7 : 540 8.9 12 24 61 NICKAJAC LOCK 35 25 45 : 73 3034 41.6 187 CHICKAMAUGA LOCK 28 63 : 137 8314 60.7 950 WATTS BAR LOCK 4 120 : 175 3757 21.5 259 36 FORT LOUDON LOCK 42 54 : 58 1825 31.5 137 MELTON HILL LOCK 21 19 4: 3 36 12.0 24 15 CLINCH RIVER BARKLEY LOCK 27.2 1 10 31 1 7 30: 33 898

EROC H3	DISTRICT NAME NASHVILLE				ISIOI IO RIV	N NAM	E						4/83	 	Ħ	ONTHS RE		6/	83
		MIN	APPRO AV6	ACH MAX :	MIN	ENTR	Y		(TIME CHAMBE AVG	R		EXIT AV6	MAX	:	DELAYED VESSELS	TIME	DELAY AVG MINUTES)	DELAY MAX
CU	MBERLAND RIVER																		
CHEATHAM LO	CK	i	8	33	1	8	51		6	14	47	1	7	61	:	28	6574	173.0	4321
CORDELL HUL	L LOCK	N	O DAT	A RECO	ORDED	FOR	THIS	LOCI	K										
OLD HICKORY	LOCK	1	3	15	1	3	63		8	15	26	1	3	33	:	70	824	11.8	91

	- ·	IVISION-NAME	MONTI	IS REPORTED
14 PITTSB	URGH OI	HIO RIVER	4/83	5/83 6/83
IVER	LCODE-LOCK NAME		LEN/WID/DRAFT (I	
OHIO RIVER	01-ENSWORTH LOCK &	DAM	0600/0110/13.0	
	01-ENSWORTH LOCK &	DAM AUX 1	0360/0056/13.0	
	02-DASHIELDS LOCK	Ł DAM	0600/0110/13.0	
	02-DASHIELDS LOCK	L DAM AUX 1	0360/0056/13.0	
	03-MONTGOMERY LOCK	t DAM	0600/0110/13.0	
	03-MONTGOMERY LOCK	& DAM AUX 1	0360/0056/13.0	
	04-NEW CUMBERLAND I	LOCK & DAM	1200/0110/13.0	
	04-NEW CUMBERLAND		0600/0110/13.0	
	05-PIKE ISLAND LOCI		1200/0110/13.0	
	05-PIKE ISLAND LOCI	K & DAM AUX 1	0600/0110/13.0	
MONONGAHELA RIVER	22-LOCK & DAM 2		0720/0110/13.0	
	22-LOCK & DAM 2 AU	X I	0360/0056/13.0	
	23-LOCK & DAM 3		0720/0056/13.0	
	23-LOCK & DAM 3 AU	XILIARY 1	0360/0056/13.0	
	24-LOCK & DAM 4		0720/0056/13.0	
	24-LOCK & DAM 4 AU		0360/0056/13.0	
	25-MAXWELL LOCK & 1		0720/0084/13.0	
	25-MAXWELL LOCK & 1	DAM AUX 1	0720/0084/13.0	
	27-LOCK & DAM 7		0360/0056/13.0	
	28-LOCK & DAM 8		0360/0056/13.0	
	29-MORGANTOWN LOCK		0600/0084/13.0	
	30-HILDEBRAND LOCK		0600/0084/13.0	
	31-OPEKISKA LOCK &	DAM	0600/0084/13.0	
ALLEGHENY RIVER	42-LOCK & DAM 2		0360/0056/13.0	
	43-LOCK & DAM 3		0360/0056/13.0	
	44-LOCK & DAN 4		0360/0056/13.0	
	45-LOCK & DAM 5		0360/0056/13.0	
	46-LOCK & DAM 6		0360/0056/13.0	
	47-LOCK & PAN 7		0360/0056/13.0	
	48-LOCK & DAN 8		0360/0056/13.0	
MITA A1115A	49-LOCK & DAM 9		0360/0056/13.0	
ONIO RIVER	71-HANNIBAL LOCKS 8	· · ·	1200/0110/13.0	
	71-HANNIBAL LOCKS 1	b DAM AUX 1	0600/0110/13.0	

PROCESSOR TO THE PROPERTY OF T

H4 PITTSB	_		DIVISION NAME OHIO RIVER							NTHS REF 5/83	;	_	83
RIVER/LOCK NAME			VESSL Recrtn	VESSL	VESSL TOTAL	BARGS	BARGS FULL	BARGES		LCKGES RECRIN	LCK6ES	LCKGES TOTAL	TONNAGE (KTONS)
OHIO RIVER	!												
ENSWORTH LOCK & DAN	ľ	#4	H										
UPBOUND STATISTICS	;	501	121	99	721	1059	1529	2588	595	48	11	654	1652
DOWNBOUND STATISTI	CS	480	109	113	702	1055	1449	2504	578	49	11	638	1560
TOTALS		981	230	212	1423	2114	2978	5092	1173	97	22	1292	3212
ENSWORTH LOCK & DAN	I AUX 1	#1	18										
UPBOUND STATISTICS	}	134	4	24	162	251	313	564	304	4	ь	314	359
DOWNBOUND STATISTI	CS	139	5	19	163	263	341	604	299	6	12	317	338
TOTALS		273	9	43	325	514	654	1168	603	10	18	631	697
DASHIELDS LOCK & DA	M	#1	H										
UPBOUND STATISTICS	}	496	0	21	517	1242	1886	3128	546	0	1	547	2059
DOWNBOUND STATISTI	CS	503	0	16	519	1322	1770	3092	549	0	2	551	1851
TOTALS		999	0	37	1036	2564	3656	6220	1095	0	3	1098	3910
DASHIELDS LOCK & DA	M AUX 1	#1	F#										
UPBOUND STATISTICS	;	108	109	89	306	73	59	132	212	88	9	309	65
DOWNBOUND STATISTI	CS	99	116	93	308	75	53	128	204	89	12	305	57
TOTALS		207	225	182	614	148	112	260	416	177	21	614	122
IONTGOMERY LOCK & D	AM	#1	14										
UPBOUND STATISTICS	1	489	11	29	528	1106	2090	3196	590	3	1	594	2425
DOWNBOUND STATISTI	C5	495	0	27	522	1550	1635	3185	590	0	1	591	1821
TOTALS		984	11	55	1050	2656	3725	6381	1180	3	2	1185	4246
MONTGOMERY LOCK & D	AM AUX 1	#1	11										
UPBOUND STATISTICS	;	7.3	131	98	302	60	28	88	176	91	3	270	31
DOWNBOUND STATISTI	CS	63	166	104	333	45	28	73	173	100	2	275	28
TOTALS		136	297	202	635	105	56	161	349	191	5	545	69
NEW CUMBERLAND LOCK	& DAM	#1	••										
UPBOUND STATISTICS	;	359	53	18	430	426	2493	2919	368	33	2	403	3381
DOWNBOUND STATISTE	CS	328	64	18	410	1642	1061	2703	335	41	2	378	1270
TOTALS		687	117	36	840	2068	3554	5622	703	74	4	781	4651

EROC DISTRICT 14 PITTSBUR		DIVISION NAME OHIO RIVER							NTHS REF 5/83		6/	83
RIVER/LOCK NAME	TON	S VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BAR6S FULL	BARGES Total	LOCK6S Commer	RECRTN		LCKGES Total ETC)	TONNAGE (KTONS)
OHIO RIVER												
NEN CUMBERLAND LK & D	AM AUX 1	***										
UPBOUND STATISTICS	8:	48	32	161	129	117	246	112	31	1	144	139
DOWNBOUND STATISTICS	12	41	17	179	250	133	383	140	29	1	170	145
TOTALS	207	2 89	49	340	379	250	629	252	60	2	314	284
PIKE ISLAND LOCK & DA	M	***										
UPBOUND STATISTICS	350	3 14	13	385	237	3040	3277	366	11	0	377	4271
DOWNBOUND STATISTICS	310		10	327	1974	1073	3047	313	6	0	319	1385
TOTALS	661	3 21	23	712	2211	4113	6324	679	17	0	696	5656
IKE ISLAND LOCK & DA		***										
UPBOUND STATISTICS	81		41	199	94	166	260	121	60	2	183	186
DOWNBOUND STATISTICS			20	285	397	149	546	181	77	1	259	160
TOTALS	241	182	61	484	491	315	806	302	137	3	442	346
MONONGAHELA	RIVER											
OCK & DAM 2		***										
UPBOUND STATISTICS	447	2	14	463	1626	935	2561	470	2	1	473	1088
DOWNBOUND STATISTICS	45	5 2	12	469	590	2039	2629	477	2	2	481	2061
TOTALS	902	2 4	26	932	2216	2974	5190	947	4	3	954	3149
OCK & DAM 2 AUX 1		***										
UPBOUND STATISTICS	113	197	51	361	93	71	164	167	131	5	303	55
DOWNBOUND STATISTICS			76	366	86	41	127	168	138	4	310	53
TOTALS	201	399	127	727	179	112	291	3 35	269	9	613	108
OCK & DAM 3		***										
UPBOUND STATISTICS	689		6	696	2927	591	3518	691	0	0	691	697
DOWNBOUND STATISTICS			5	729	398	3201	3599	724	0	0	724	3130
TOTALS	1413	1	11	1425	33 25	3792	7117	1415	0	0	1415	3827

EROC DISTRICT H4 PITTSBUR			ISION NAP I RIVER				4/83	3	NTHS REF 5/83	,		83
RIVER/LOCK NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL		LOCKGS	LCKGES RECRTN	LCKGES	LCKGES TOTAL	TONNAGE (KTONS)
MONONGAHELA	RIVER											
LOCK & DAM 3 AUXILIAR	Y 1 4	***										
UPBOUND STATISTICS	151	150	117	418	160	69	229	270	97	3	370	64
DOWNBOUND STATISTICS		168	105	391	72	95	167	223	114	4	341	105
TOTALS	269	318	222	809	232	164	396	493	211	7	711	169
LOCK & DAN 4	•	***										
UPBOUND STATISTICS	612	12	3	627	2884	493	3377	638	4	2	644	524
DOWNBOUND STATISTICS	-	3	2	654	315	3179	3494	661	1	1	663	3086
TOTALS	1261	15	5	1281	3199	3672	6871	1299	5	3	1307	3610
LOCK & DAN 4 AUXILIAR	Y 1 +	***										
UPBOUND STATISTICS	44	116	53	213	61	22	83	101	87	0	188	12
DOWNBOUND STATISTICS	25	120	43	188	27	18	45	70	91	2	163	18
TOTALS	69	236	96	401	88	40	128	171	178	2	351	30
MAXWELL LOCK & DAM	;	111										
UPBOUND STATISTICS	487	152	7	646	2442	328	2770	496	87	2	585	369
DOWNBOUND STATISTICS	98	147	3	248	54	492	546	104	93	2	199	468
TOTALS	585	299	10	894	2496	820	3316	900	180	4	784	837
MAXMELL LOCK & DAM AU	X L +	+ # #										
UPBOUND STATISTICS	98	116	1	215	461	66	527	101	71	0	172	72
DOWNBOUND STATISTICS	493	134	2	629	184	2609	2793	496	74	0	570	2520
TOTALS	591	250	3	844	645	2675	3320	597	145	0	742	2592
LOCK & DAM 7		***										
UPBOUND STATISTICS	517	24	14	555	2027	401	242B	940	35	3	978	456
DOWNBOUND STATISTICS	501	23	28	552	245	2174	2419	948	28	3	979	2053
TOTALS	1018	47	42	1107	2272	2575	4847	1888	63	6	1957	2509
LOCK & DAM 8	+	+++										
UPBOUND STATISTICS	446	11	13	470	1728	419	2147	827	14	3	844	472
DOWNBOUND STATISTICS	433	15	17	465	252	1862	2114	822	18	3	843	1772
TOTALS	879	26	30	935	1980	2281	4261	1649	32	6	1687	2244

	TRICT NAME TSBURGH			SION NAME RIVER				4/83		NTHS REP 5/83		6/	83
RIVER/LOCK NAME		TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BAR6S EMPTY	BARGS FULL	BARGES TOTAL		RECRIN		LCKGES TOTAL ETC)	TONNAGE (KTONS)
MONONGA	HELA RIVER												
HORGANTOWN LOCK	& DAM	#											
UPBOUND STATIST	ICS	40	75	4	119	165	7	172	58	60	1	119	6
DOWNBOUND STATE		41	82	4	127	6	160	166	56	66	2	124	157
TOTALS		81	157	8	246	171	167	338	114	126	3	243	163
HILDEBRAND LOCK	& DAM		+										
UPBOUND STATIST	ICS	22	54	3	79	51	7	58	25	45	1	71	5
DOWNBOUND STATE	STICS	21	53	4	78	6	49	55	25	45	1	71	54
TOTALS		43	107	7	157	57	56	113	50	90	2	142	59
OPEKISKA LOCK &			•										
UPBOUND STATIST	ICS	8	119	5	132	4	7	11	15	81	0	96	6
DOWNBOUND STATE	ISTICS	6	119	7	132	6	2	8	14	86	0	100	2
TOTALS		14	238	12	264	10	9	19	29	167	0	196	8
ALLEGHE	NY RIVER												
LOCK & DAM 2		ŧ											
UPBOUND STATIST		201	992	19	1212	243	311	554	311	495	10	816	340
DOWNBOUND STATI	ISTICS	191	995	33	1219	320	231	551	311	478	8	797	118
TOTALS		392	1987	52	2431	563	542	1105	622	973	18	1613	458
LOCK & DAM 3		+	••										
UPBOUND STATIST		205	474	21	700	257	326	583	270	298	5	573	346
DOWNBOUND STATE	ISTICS	212	479	20	711	366	244	610	274	288	7	569	115
TOTALS		417	95 3	41	1411	623	570	1193	544	586	12	1142	461
LOCK & DAM 4			**										
UPBOUND STATIST	TICS	148	409	11	568	434	80	514	180	225	2	407	105
DOWNBOUND STATE	ISTICS	147	386	13	546	81	435	516	184	195	3	382	191
TOTALS		295	795	24	1114	515	515	1030	364	420	5	789	296

EROC H4	DISTRICT NAME PITTSBURGH		-	ISION NA O RIVER	ME				4/83		NTHS REF 5/83		6/	83
RIVER/LOCK	NAME	TOWS	VESSL RECRTN	VESSL OTHER		ESSL OTAL	BARGS Empty	BARGS Full	BARGES TOTAL		RECRIN		TOTAL	TONNAGE (KTONS)
AL	LLEGHENY RIVER													~~
LOCK & DAM	5	**												
UPBOUND ST	-	103	220	1		324	427	4	431	111	132	2	245	1
	STATISTICS	105	215	î		321	11	424	435	114	130	2	246	181
TOTALS		208	435	2		645	438	428	866	225	262	4	491	182
LOCK & DAM	6	++												
UPBOUND ST	TATISTICS	103	85	1		189	428	4	432	112	73	2	187	i
DOWNBOUND	STATISTICS	102	89	2		193	3	427	430	113	76	2	191	181
TOTALS		205	174	3		382	431	431	862	225	149	4	378	182
LOCK & DAM	7	**	•											
UPBOUND ST		8	88	3		99	13	2	15	11	63	2	76	0
	STATISTICS	4	95	6		105	ı	6	7	11	70	2	83	3
TOTALS		12	183	9		204	14	8	22	22	133	4	159	3
LOCK & DAM	_	**			AND			REPORTED						
UPBOUND ST		0	73	0		73	0	0	0	0	51	0	51	0
	STATISTICS	0	80	0		80	0	0	0	0	54	0	54	0
TOTALS		0	153	0		153	0	0	0	0	105	0	105	0
LOCK & DAM	9	**	. ONLY	SECOND	AND	THIRD	MONTHS	REPORTED						
UPBOUND ST	TATISTICS	0	67	0		67	0	0	0	0	45	0	45	0
DOWNBOUND	STATISTICS	0	67	0		67	0	0	0	0	45	0	45	0
TOTALS		0	134	0		134	0	0	0	0	90	0	90	0
01	HIO RIVER													
HANNIBAL LE	DCKS & DAM	41	•											
UPBOUND ST		339	1	1		341	867	2699	3566	340	i	i	342	3723
DOWNBOUND	STATISTICS	322	2	1		325	1462	2042	3504	323	1	2	326	2764
TOTALS		661	3	2		666	2329	4741	7070	663	2	3	668	6487

EROC	DISTRICT NAME		DIVI	SION NAM	Ε				ME	INTHS REP	ORTED		
H4	PITTSBURGH		OHIO	RIVER				4/83	3	5/83		6/	183
RIVER/LOCK	NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS Full	BARGES TOTAL	LOCK6S Commer	LCKGES RECRTN (NAV	LCKGES OTHER OPN,	TOTAL	TONNAGE (KTONS)
01	IO RIVER												
HANNIBAL LO	OCKS & DAM AUX I	**	•										
UPBOUND ST	TATISTICS	47	27	6	80	103	94	197	55	20	23	98	86
DOWNBOUND	STATISTICS	60	29	11	100	123	92	215	74	24	21	119	85
TOTALS		107	56	17	180	226	186	412	129	44	44	217	171

EROC DISTRI H4 PITTSB				OH	VISION IO RIV	ER		· ••••••••••••••••••••••••••••••••••••				4/83		MONTHS R 5/	83	b/ 	
		MIN	APPRO AV6	ach Na X	: MIN	LOCK ENTRY AVG	PROCE MAX	SSING C : NIN	TINE HAMBE AVS	(MIN.) R MAX :	HIN	EXIT AVB	MAX	: DELAYE : VESSEL :	D DELAY S TIME (IN	DELAY AVG MINUTES)	DELAY MAX
OHIO RIVER																	
ENSNORTH LOCK & DAM		1	11	68	1	7	38	7	16	59	1	8	57	; 741	57837	78.1	595
ENSWORTH LOCK & DAN	AUX 1	1	5	52	1	5	27	5	10	30	i	7	31	: 254	76017	299.3	1200
DASHIELDS LOCK & DA	H	i	16	98	2	8	40	5	11	38	2	10	53	: 403	23038	57.2	634
DASHIELDS LOCK & DA	M AUX 1	1	9	58	1	2	12	5	6	28	ı	3	16	: 87	1552	17.8	480
MONTGOMERY LOCK & D	AM	1	11	63	1	9	39	6	13	41	1	12	83	: 476	27930	58.7	350
HONTGOHERY LOCK & D	AM AUX 1	1	5	35	i	3	33	5	10	24	1	4	25	: 95	749	7.9	35
NEW CUMBERLAND LOCK	& DAM	1	17	58	1	5	24	5	14	42	1	11	30	: 246	11840	48.1	511
NEN CUMBERLAND LK &	DAM AUX	ı	13	58	1	2	16	5	12	30	1	9	27	: 30	422	14.1	41
PIKE ISLAND LOCK &	DAM	1	15	60	1	8	26	5	12	27	1	9	24	: 160	5462	34.1	135
PIKE ISLAND LOCK &	1 XUA HAQ	. 1	10	39	1	3	16	5	11	24	1	7	18	: 64	1030	16.1	50
MONONSAHEL	A RIVER																
LOCK & DAM 2		1	12	55	1	5	36	5	10	34	2	6	46	: 246	7995	32.5	184
LOCK & DAM 2 AUX 1		1	7	32	1	2	12	5	6	12	1	2	13	: 95	937	9.9	26
LOCK & DAN 3		1	10	42	2	6	20	6	10	30	2	6	18	: 544	16235	29.8	125
LOCK & DAM 3 AUXILI	ARY 1	1	7	36	ı	2	14	5	8	14	i	3	13	: 101	1191	11.8	41
LOCK & DAM 4		1	10	55	1	6	15	5	9	26	2	7	26	: 417	12231	29.3	139

180

5.6

17

32

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/03 THROUGH 6/03 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED PITTSBURGH OHIO RIVER 4/83 H4 5/83 6/83 LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY DELAY ENTRY CHAMBER EXIT : VESSELS TIME AV6 APPROACH MIN AVG MAX: MIN AVG MAX: MIN AVG MAX: MIN AVG MAX: (IN MINUTES) MONONGAHELA RIVER 1 2 11 1 4 20: LOCK & DAM 4 AUXILIARY I 9 50 7 9 18 45 486 10.8 29 MAXWELL LOCK & DAM 1 8 30 1093 9.9 5 17 42 8 26: 110 33 10 -MAXWELL LOCK & DAM AUX 1 1 11 51 B 27: 109 1212 6 28 11 39 11.1 56 LOCK & DAM 7 9 51: 414 18204 44.0 647 46 LOCK & DAM 8 33 18 9 35: 283 12293 43.4 792 MORSANTOWN LOCK & DAM 4 10 22 4 15: 12 57 4.8 10 15 HILDEBRAND LOCK & DAM 3 15: 1 3 12 5 36 7.2 2 12 30 17 OPEKISKA LOCK & DAM 4 15 1 2 13 7 10 18 2 3 7: 9 76 8.4 20 ALLEGHENY RIVER LOCK & DAM 2 25 25 7 27 5 37: 713 7613 10.7 122 LOCK & DAM 3 53 21 5794 7 12 26 : 330 17.6 146 LOCK & DAM 4 5 20 4 25: 223 2378 10.7 22 20 240 LOCK & DAM 5 2 27 1 10: 57 453 7.9 8 11 21 LDCK & DAM 6 9.6 10: 34 326 24 LOCK & DAM 7 17 39 375 9.6 LOCK & DAM 8 7: 51 449 8.8 10 10

9 15

1 1 3:

1 2

LOCK & DAM 9

EROC	DISTRICT NAME			DIVIS OHIO	ION NAM	Ε					4/83		MON	THS REF 5/8:		6/	83	
H4	PITTSBURGH						~											
		•	APPROACI AV6 M	•	ENTE	PROCE		CHAMBE	R		EXIT AVG		: 1	DELAYED VESSELS	TIME	DELAY AVG MINUTES)	DELAY MAX	•
	OHIO RIVER																	
HANNIBAL	LOCKS & DAM	1	17	55	1 10	27	8	16	36	2	11	30	:	159	6693	42.1	235	
UANN 7 DAI	LOCKE & DAM ALLY 1	1	11	15	1	L 18	7	16	49	1	8	18	:	16	244	15.3	33	

EROC DISTRI	CT NAME !)IVISION NAME	MONT	HS REPORTED	
K3 JACKSO	NVILLE S	SOUTH ATLANTIC	4/83	5/83	6/83
RIVER	LCODE-LOCK NAME		LEN/WID/DRAFT ((FT/FT/FT)	
OKEECHOBEE WATRWAY	01-ST LUCIE LOCK &	DAM	0275/0050/14.0		
	02-MOORE HAVEN LO	CK	0275/0050/11.0		
	03-DRTONA LOCK & 1)AN	0275/0050/12.0		
	04-W P FRANKLIN LO	CK & CTRL STRCT	0450/0056/14.0		
	05-PORT MAYACA LO	CK	0450/0056/14.0		
CROSS FLA BRG CNL	11-HENRY HOLLAND	BUCKMAN LOCK	0600/0084/15.0		
	12-EUREKA LOCK		0600/0084/15.0		
	13-INGLIS LOCK		0600/0084/15.0		
CANAVERAL HARBOR	21-CANAVERAL LOCK		0600/0090/15.0		
OKLAWAHA RIVER	31-MOSS BLUFF LOC	K & DAM	0156/0030/****		

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

EROC	DISTRICT	NAME	DIVISION NAME	MDI	NTHS REPORTED	
K5	MOBILE		SOUTH ATLANTIC	4/83	5/83	6/83
RIVER		FCODE-FOCK	NAME	LEN/WID/DRAFT	(FT/FT/FT)	
BLKWAR/TO	OMBIGBEE RI	01-COFFEEV	ILLE LOCK	0600/0110/12.0		
		02-DEMOPOL	IS LOCK & DAM	0600/0110/12.0		
		03-WARRIOR	LOCK & DAM	0600/0110/12.0		
		04-WILLIAM	BACON OLIVER LK & DM	0600/0095/12.0		
		05-HOLT LO	CK & DAM	0600/0110/12.0		
		06-JOHN HO	ILLIS BANKHEAD LK & DM	0600/0110/12.0		
ALABAMA-I	CODSA RIVERS	11-CLAIBOR	NE LOCK & DAM	0600/0084/12.0		
		12-MILLERS	FERRY LOCK & DAM	0600/0084/12.0		
			LUFF LOCK & DAM	0600/0084/12.0		
APLCH/CH	TCH/FLNT RI	21-JIM W00	DRUFF LOCK & DAM	0450/0082/12.0		
		22-GEORGE	W ANDREWS LOCK & DAM	0450/0082/12.0		
		23-WALTER	F GEORGE LOCK & DAM	0450/0082/12.0		
TENN TONI	BIGBEE WATERW	AY41-GAINESV	ILLE LOCK & DAM	0600/0110/12.0		
		42-ALICEVI	LLE LOCK & DAM	0600/0110/12.0		
		43-COLUMBU	S LOCK & DAM	0600/0110/12.0		
		44-ABERDEE	N LOCK & DAM	0600/0110/12.0		
PEARL RI	VER	31-LOCK 1		0310/0065/ 9.0		
		32-LOCK 2		0310/0065/ 9.0		
		33-LOCK 3		0310/0065/ 9.0		

EROC DISTRICT NAME K5 MOBILE			ISION NAP TH ATLANT				4/8:		NTHS REF 5/83		6/	83
RIVER/LOCK NAME	TOWS	VESSL Recrtn	VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS Full	BARGES Total		RECRTN		TOTAL	TONNAGE (KTONS)

BLKWAR/TOMBIGBEE R	I											
COFFEEVILLE LOCK	ŧ.	**										
UPBOUND STATISTICS	582	197	36	B15	2216	156	2372	548	64	62	674	307
DONNBOUND STATISTICS	618	231	24	873	153	2416	2569	580	70	54	704	3704
TOTALS	1200	428	60	1688	2369	2572	4941	1128	134	116	1378	4011
DEMOPOLIS LOCK & DAM		**										
UPBOUND STATISTICS	566	22	28	616	2191	161	2352	547	10	56	613	324
DOWNBOUND STATISTICS	587	22	26 25	635	105	2352	2352 2457	556			955 912	
TOTALS	367 1153	23 45	23 53	1251	2296	2513	4809	1103	12 22	54	1235	3590 3914
IDIMES	1123	43	23	1231	2270	2313	4007	1103	22	110	1233	3714
WARRIOR LOCK & DAM		**										
UPBOUND STATISTICS	552	7	28	587	2300	138	2438	558	3	5	566	292
DOWNBOUND STATISTICS	576	8	11	595	97	2415	2512	578	3	3	584	3694
TOTALS	1128	15	39	1182	2397	2553	4950	1136	6	8	1150	3986
WILLIAM BACON OLIVER LK & D)M #	**										
UPBOUND STATISTICS	564	11	73	648	2310	115	2425	774	5	38	817	188
DOWNBOUND STATISTICS	572	20	73	665	79	2394	2473	831	18	28	877	3619
TOTALS	1136	31	146	1313	2389	2509	4898	1605	23	66	1694	3807
		•••	• • •							•		
HOLT LOCK & DAM		##										
UPBOUND STATISTICS	533	7	29	569	2296	91	2387	543	4	15	562	158
DOWNBOUND STATISTICS	527	13	39	579	89	2359	2448	549	8	13	570	3572
TOTALS	1060	20	86	1148	2385	2450	4835	1092	12	20	1132	3730
JOHN HOLLIS BANKHEAD LK & D	• M	**										
UPBOUND STATISTICS	385	43	16	444	1554	90	1644	390	21	2	413	151
DOWNBOUND STATISTICS	396	65	9	470	95	1618	1713	396	33	1	430	2458
TOTALS	781	108	25	914	1649	1708	3357	786	54	3	843	2609
ALABAMA-COOSA RIVE	RS											
A. A. B.												
CLAIBORNE LOCK & DAM		707	4	461	147	4.4			700	•	4**	
UPBOUND STATISTICS	35 75	387 700	4	426	107	10	117	37	388	8	433	12
DOWNBOUND STATISTICS TOTALS	35 70	388 775	7 11	430 856	12	105	117 234	40 77	389	7	436	158
IUIMLO	70	773	11	979	119	115	234	"	777	15	869	170

EROC DISTRICT NAME		DIVI	SION NAM	Ε				HO	INTHS REP	ORTED		
KS MOBILE		SOUT	H ATLANT	IC			4/83	; 	5/83		6/	83
RIVER/LOCK NAME	TOWS	VESSL Recrin		VESSL TOTAL	BARGS Empty	BARGS FULL	BARGES TOTAL		RECRIN		LCKGES TOTAL	TONNAGE (KTONS)
ALABAMA-COOSA RIVE												
TILLERS FERRY LOCK & DAM		H										_
UPBOUND STATISTICS	23	32	1	56	56	11	67	25	30	17	72	9
DOWNBOUND STATISTICS	21	40	7	68	11	54	65	28	30	15	73	70
TOTALS	44	72	8	124	67	65	132	53	60	32	145	79
IONES BLUFF LOCK & DAM	•	++										
UPBOUND STATISTICS	4	48	0	52	5	6	11	5	34	4	43	9
DOWNBOUND STATISTICS	3	67	0	70	7	5	12	4	47	3	54	7
TOTALS	7	115	0	122	12	11	23	9	18	7	97	16
APLCH/CHTCH/FLNT R	ſ											
JIM WOODRUFF LOCK & DAM	4											
UPBOUND STATISTICS	66	74	8	148	135	33	168	72	45	12	129	77
DOWNBOUND STATISTICS	69	128	3	200	36	131	167	74	72	13	159	78
TOTALS	135	202	11	348	171	164	335	146	117	25	288	155
GEORGE W ANDREWS LOCK & DAM		••										
UPBOUND STATISTICS	44	139	7	190	79	20	99	52	100	4	156	37
DOWNBOUND STATISTICS	40	179	5	224	21	68	89	44	121	11	176	46
TOTALS	84	318	12	414	100	88	188	96	221	15	332	83
NALTER F GEORGE LOCK & DAM		F 8										
UPBOUND STATISTICS	5	81	i	87	0	5	5	7	31	5	43	12
DOWNBOUND STATISTICS	5	110	2	117	5	0	5	6	55	7	68	0
TOTALS	10	191	3	204	5	5	10	13	B6	12	111	12
TENN TONBIGBEE WAT	ERWAY											
GAINESVILLE LOCK & DAM		••										
UPBOUND STATISTICS	19	21	12	52	20	14	A.A	74	10	D	£0	(h
			12		28	16	44	31	18	9	58	18
DOWNBOUND STATISTICS	24	22	7	53	10	30	40	30	19	14	63	63
TOTALS	43	43	19	105	28	46	84	61	37	23	121	81

EROC K5	DISTRICT NAME MODILE		SOUT	SION NAI H ATLAN	TIC			4/83	;		5		83
RIVER/LOCK	K NAME	TOWS	VESSL RECRTN	VESSL OTHER	VESSL Total	BAR6S EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S Commer	LCKGES RECRTN (NA	LCKGES OTHER /, OPN, I	LCKGES TOTAL ETC)	TDNNAGE (KTONS)
1	TENN TOMBIGBEE WATE												
ALICEVILLE	E LOCK & DAM	***											
UPBOUND S	STATISTICS	7	362	6	375	8	11	19	10	280	24	314	12
DOWNBOUN	D STATISTICS	9	382	0	391	9	9	18	11	293	26	330	9
TOTALS		16	744	6	766	17	20	37	21	573	50	644	21
COLUMBUS L	LOCK & DAM	***											
UPBOUND S	STATISTICS	16	214	9	239	7	15	22	28	143	9	180	12
DOWNBOUNT	D STATISTICS	19	252	7	278	10	17	27	26	134	8	168	7
TOTALS		35	466	16	517	17	32	49	54	277	17	348	19
ABERDEEN I	LOCK & DAM	NO DAT	A RECOR	DED FOR	THIS LOCK								
į	PEARL RIVER												
LOCK 1		NO DAT	A RECOR	DED FOR	THIS LOCK								
LOCK 2		NO DAT	A RECOR	DED FOR	THIS LOCK								
FOCK 3		NO DAT	A RECOR	DED FOR	THIS LOCK								

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED K5 MOBILE SOUTH ATLANTIC 4/83 5/83 6/83 : DELAYED DELAY LOCK PROCESSING TIME (MIN.) DELAY DELAY APPROACH ENTRY CHAMBER EXIT : VESSELS TIME AVS MAX (IN MINUTES) MIN AV6 MAX : MIN AV6 MAX : MIN AV6 MAX : MIN AV6 MAX : BLKWAR/TOMBISBEE RI COFFEEVILLE LOCK 35.0 199 8 42 4 31 35 : 596 20886 1 11 DEMOPOLIS LOCK & DAM 1 11 45 4 22 81 : 513 16873 32.9 360 11 38 MARRIOR LOCK & DAM 1 12 61 1 4 25 42.5 270 13 33 27 : 486 20666 WILLIAM BACON OLIVER LK & DM 1 12 298 1 6 35 132914 159.4 877 13 1 13 430 : 834 HOLT LOCK & DAM 1 10 59 7 30 37 : 26612 51.6 230 JOHN HOLLIS BANKHEAD LK & DM 1 11 56 1 7 28 8619 129 ALABAMA-COOSA RIVERS CLAIBORNE LOCK & DAM 10 2.5 MILLERS FERRY LOCK & DAM 9: 30.5 60 JONES BLUFF LOCK & DAM 1 2 13 1 2 12 31 12: 4.5 5 14 APLCH/CHTCH/FLNT RI JIM WOODRUFF LOCK & DAM 2 25 11 27 161 26.8 55 8: GEORGE W ANDREWS LOCK & DAM 1 2 2 8 4.0 5 WALTER F GEORGE LOCK & DAM 1 2 13 1 3 17 5 15 29 3 14: 10 5.0 5 TENN TONBIGBEE WATERWAY GAINESVILLE LOCK & DAM 2238 373.0 38 21 27 : 2167 5 27

25 :

10:

111

22

1093

202

9.8

9.2

26

23

ALICEVILLE LOCK & DAM

COLUMBUS LOCK & DAM

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37

2 35

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PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED

K5 MOBILE SOUTH ATLANTIC 4/83 5/83 6/83

LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY
APPROACH ENTRY CHAMBER EXIT : VESSELS TIME AV6 MAX

MIN AVG MAX: MIN AVG MAX: MIN AVG MAX: MIN AVG MAX: (IN MINUTES)

TENN TOMBISBEE WATERWAY

ABERDEEN LOCK & DAM NO DATA RECORDED FOR THIS LOCK

PEARL RIVER

LOCK 1 NO DATA RECORDED FOR THIS LOCK

LOCK 2 NO DATA RECORDED FOR THIS LOCK

LOCK 3 NO DATA RECORDED FOR THIS LOCK

ERDC DISTRICT NAME DIVISION NAME HONTHS REPORTED
K6 SAVANNAH SOUTH ATLANTIC 4/83 5/83 6/83

RIVER LCODE-LOCK NAME LEN/WID/DRAFT (FT/FT/FT)

SAVANNAH RIVER 01-NEW SAVANNAH BLUFF LOCK & DAM 0360/0056/12.0

EROC	DISTRICT NAME		DIVI	SION NAM	Ε				MC	INTHS REF	PORTED		
K6	SAVANNAH		SOUT	TH ATLANT	IC			4/83	3	5/83	3	6/	/83
RIVER/LOC	CK NAME	TOWS	VESSL Recrtn	VESSL Other	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCKGS Commer	LCKGES RECRTN (NA		TOTAL	TONNAGE (KTONS)
	SAVANNAH RIVER												
NEW SAVA	NNAH BLUFF LOCK & DA	M #1	i#										
UPBOUND	STATISTICS	0	26	0	26	0	0	0	0	22	1	23	0
DOWNBOU	ND STATISTICS	0	30	0	30	0	0	0	0	22	1	23	0
TOTALS		0	56	0	56	0	Û	0	0	44	2	46	0

ERDC Kó	DISTRICT NAME SAVANNAH					N NAME [LANT]						4/83	;	H	ONTHS REI 5/8:	_,,,	6/	83
**********		MIN	APPROA AV6		: MIN	LOCK (ENTRY AVG		CH	TIME HAMBER AVG	ł		EXIT AV6	MAX		DELAYED VESSELS	TIME	DELAY AV6 MINUTES)	DELAY MAX
	SAYANNAH RIVER	A 3	6	20	2		10	5	10	22	2	6	20		7	40	13.3	20

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED K7 WILMINGTON SOUTH ATLANTIC 4/83 5/83 RIVER LEN/WID/DRAFT (FT/FT/FT) LCODE-LOCK NAME CAPE FEAR RIVER 0200/0040/10.0 01-LOCK & DAM 1 02-LOCK & DAM 2 0200/0040/10.0 03-WILLIAM D HUSKE LOCK & DAM 0300/0040/10.0

ERDC DISTRICT NAME K7 MILMINGTON			SION NAM 'H ATLANT				4/83		INTHS REF 5/83		6/	83
RIVER/LOCK NAME	T OW5	VESSL RECRIN	VESSL OTHER	VESSL TOTAL	BAR6S EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S COMMER	LCKGES RECRIN (NAV	LCKGES OTHER , OPN, E	LCKGES TOTAL (TC)	TONNAGE (KTONS)
CAPE FEAR RIVER												
LOCK & DAM 1	•	F#										
UPBOUND STATISTICS	31	19	1	51	0	31	31	58	10	5	73	32
DOWNBOUND STATISTICS	31	34	1	66	31	0	31	54	16	8	78	0
TOTALS	62	53	2	117	31	31	62	112	26	13	151	32
LOCK & DAM 2	•	••										
UPBOUND STATISTICS	31	20	0	51	9	31	31	60	3	3	66	62
DOWNBOUND STATISTICS	31	35	0	66	31	0	31	55	10	8	73	0
TOTALS	62	55	0	117	31	31	62	115	13	11	139	62
WILLIAM O HUSKE LOCK & DAM	•	••										
UPBOUND STATISTICS	31	37	0	68	1	30	31	33	9	0	42	28
DOWNBOUND STATISTICS	31	51	0	82	31	0	31	31	12	3	46	0
TOTALS	62	98	Ô	150	32	20	62	64	21	3	88	28

EROC K7	DISTRICT NAME WILMINGTON					N NAME TLANTI						4/83	,	HONTHS RE 5/8		6/	83	
			APPRO AV6	ACH Max :		ENTRY	!		CHAMBI	(MIN.) ER MAX :		EXIT		: DELAYED : VESSELS	TIME	DELAY AVG (MINUTES)	DELAY MAX	
CAP	E FEAR RIVER													*****				
LOCK & DAM 1	l	2	3	10	5	5	10	;	5 14	15	5	5	10	: 42	140	3.3	8	
LOCK & DAM 2	?	5	5	5	5	5	15	;	5 8	15	5	8	40	: 77	385	5 5.0	5	
WILLIAM O HU	ISKE LOCK & DAM	2	4	10	5	5	15	20) 29	30	5	5	6	: 35	90	2.6	5	

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

 EROC
 DISTRICT NAME
 DIVISION NAME
 MONTHS REPORTED

 L2
 SACRAMENTO
 SOUTH PACIFIC
 4/83
 5/83
 6/83

 RIVER
 LCQDE-LOCK NAME
 LEN/WID/DRAFT (FT/FT/FT)

 SCRMNTO DWSHP CHNL
 01-BARGE CANAL LOCK
 0640/0086/23.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 4/83 THROUGH 6/83 INSTITUTE FOR WATER RESOURCES

EROC	DISTRICT	NAME	DIVISION NAME	MONT	THS REPORTED	
M3	GALVESTO	N	SOUTHWESTERN	4/83	5/83	6/83
				,		~~~~~~~
RIVER		LCODE-LOCK NAME		LEN/WID/DRAFT	(FT/FT/FT)	
GULF INTRA	ACOASTAL	11-COLORADO RIVE	ER EAST LOCK	1200/0075/15.0		
		12-COLORADO RIVI	ER WEST LOCK	1200/0075/15.0		
		13-BRAZOS EAST (GATE	9999/0075/15.0		
		14-BRAZOS WEST	SATE	9999/0075/15.0		

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

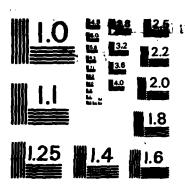
NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

EROC	DISTRICT	NAME	DIVISION NAME	MON	THS REPORTED	
M4	LITTLE RO	CK	SOUTHWESTERN	4/83	5/83	6/83
RIVER		LCODE-LOCK NAME		LEN/WID/DRAFT	(FT/FT/FT)	
ARKANSAS R	IVER	01-NORRELL LOCK	& DAM	0600/0110/12.0		
		02-LOCK & DAM 2		0600/0110/12.0		
		03-LOCK & DAM 3		0600/0110/12.0		
		04-LOCK & DAM 4		0600/0110/12.0		
		05-LOCK & DAM 5		0600/0110/12.0		
		06-DAVID D TERRY	LQCK & DAM	0600/0110/12.0		
		07-MURRAY LOCK &	DAM	0600/0110/12.0		
		08-TOAD SUCK FER	RY LOCK & DAM	0600/0110/12.0		
		09-LOCK & DAM 9		0600/0110/12.0		
		10-DARDANELLE LO	CK & DAN	0600/0110/12.0		
		11-DZARK LOCK &	DAM	0600/0110/12.0		
		13-LOCK & DAM 13		0600/0110/12.0		

EROC DISTRICT NAME DIVISION NAME 14 LITTLE ROCK SOUTHWESTERN								4/83	;	NTHS REP 5/83		6/	
RIVER/LOCK N		TOWS	VESSL Recrin	VESSL	VESSL TOTAL	BARGS	BARGS Full		LOCKES	LCKGES RECRTN	FCKBER	LCKGES TOTAL	TONNAGE (KTONS)
 Ari	(ANSAS RIVER												
NORRELL LOCK	(L NAW	4:											
UPBOUND STA		176	9	19	204	546	355	901	48	8	156	212	512
DOWNBOUND S		169	13	25	207	134	659	793	39	11	165	215	888
TOTALS		345	22	44	411	680	1014	1694	87	19	321	427	1400
LOCK & DAM 2	2	41											
UPBOUND STA	ATISTICS	176	65	20	261	543	361	904	190	46	7	243	513
DOWNBOUND 9	STATISTICS	169	56	26	251	133	672	805	180	49	10	239	895
TOTALS		345	121	46	512	676	1033	1709	370	95	17	482	1408
LOCK & DAM 3	3	*	F F										
UPBOUND STA	TISTICS	151	33	12	196	474	352	826	158	28	28	214	503
DOWNBOUND S	STATISTICS	149	32	16	197	126	597	723	156	28	28	212	850
TOTALS		300	65	28	393	900	949	1549	314	56	56	426	1353
OCK & DAM 4	ļ	*	F+										
UPBOUND STA		153	26	15	194	462	345	807	163	15	17	195	499
DOWNBOUND S	STATISTICS	154	31	18	203	127	589	716	163	22	15	200	771
TOTALS		307	57	33	397	589	934	1523	326	37	32	395	1270
DCK & DAM 5		#:	**										
UPBOUND STA		126	158	19	303	239	307	643	141	137	9	287	406
DOWNBOUND S	STATISTICS	129	155	12	296	133	435	568	138	134	8	280	660
TOTALS		255	313	31	599	469	742	1211	279	271	17	567	1066
	RY LOCK & DAM	**	-										
UPBOUND STA		131	164	22	317	345	307	652	149	122	7	278	406
DOWNBOUND S	STATISTICS	129	164	25	318	128	437	565	145	124	8	277	668
TOTALS		260	328	47	635	473	744	1217	294	246	15	555	1074
WRRAY LOCK		*1	-										
UPBOUND STA		106	230	6	342	326	232	558	112	180	10	202	318
DOWNBOUND S	STATISTICS	101	234	13	348	86	378	464	108	170	7	285	593
TOTALS		207	464	19	690	412	610	1022	220	350	17	587	911

ERDC N4	DISTRICT NAME LITTLE ROCK			SION NAM	-			4/83		ONTHS REF 5/83		6/	9 3
RIVER/LOCK	NAME	TOWS	VESSL RECRIN	VESSL DTHER	VESSL TOTAL	BARGS EMPTY	BARGS FULL	BARGES TOTAL	LOCK6S COMMER	RECRIN	LCKGES OTHER , OPN, E	LCKGES TOTAL (TC)	TONNAGE (KTONS)
AR	KANSAS RIVER												
TOAD SUCK F	ERRY LOCK & DAM	#1	F#										
UPBOUND ST		105	35	5	145	325	231	556	108	26	12	146	320
DOWNBOUND	STATISTICS	99	36	5	140	81	379	460	103	25	12	140	594
TOTALS		204	71	10	285	406	610	1016	211	51	24	286	914
LOCK & DAN	9	*	 										
UPBOUND ST	ATISTICS	98	109	3	210	310	217	527	100	97	11	208	298
DOWNBOUND	STATISTICS	94	111	7	212	78	378	456	97	102	12	211	588
TOTALS		192	220	10	422	388	595	983	197	199	23	419	986
DARDANELLE	LOCK & DAM		++										
UPBOUND ST	ATISTICS	130	67	6	203	335	224	559	133	49	16	198	317
DOWNBOUND	STATISTICS	124	68	8	200	77	404	481	130	47	18	195	624
TOTALS		254	135	14	403	412	628	1040	263	96	34	393	941
OZARK LOCK	& DAM	3 1	: +										
UPBOUND ST	ATISTICS	95	61	7	163	314	183	497	98	29	10	137	255
DOWNBOUND	STATISTICS	89	58	10	157	47	378	425	94	28	12	134	588
TOTALS		184	119	17	320	361	561	922	192	57	22	271	843
LOCK & DAM	13	#1	F F										
UPBOUND ST		97	65	5	167	315	187	502	98	33	19	150	258
DOMNBOUND	STATISTICS	90	75	6	171	49	377	426	93	38	20	151	589
TOTALS		187	140	11	32 8	364	564	928	191	71	39	301	847

EROC DISTRICT NAME M4 LITTLE ROCK			SOL	ISION ITHWES	TERN						4/83		MONTHS RE	3	6/	
	MIN	APPRO AV6	ACH Max :	HIN	LOCK Entry AV6	PROCES	SSING) HIN	TIME CHAMBE AVG	(MIN.) R Max) : MIN	EXIT AV6	MAX	: DELAYEI : VESSEL!) DELAY 6 TIME (IN	DELAY AVG MINUTES)	DELAY HAX
ARKANSAS RIVER			*****			*****										
NORRELL LOCK & DAM	1	5	62	1	4	31	1	3	30	1	5	64	: 20	524	26.2	67
LOCK & DAM 2	1	8	58	1	8	42	5	10	58	1	9	73	: 117	3436	29.4	190
LOCK & DAM 3	1	9	50	1	7	28	5	10	28	1	9	42	: 60	1626	27.1	170
LOCK & DAN 4	1	11	40	1	8	40	5	10	55	1	11	62	: 44	30595	695.3	29280
LOCK & DAM 5	1	7	85	1	5	32	2	9	26	1	8	73	: 214	2296	10.7	82
DAVID D TERRY LOCK & DAM	1	9	50	1	6	47	5	9	22	1	8	40	: 91	1577	17.3	60
MURRAY LOCK & DAM	1	4	34	1	4	26	5	9	35	i	6	45	: 359	3476	9.7	59
TOAD SUCK FERRY LOCK & DAM	ı	10	50	1	8	38	5	9	51	1	8	41	: 95	1048	3 11.0	55
LOCK & DAM 9	1	8	49	1	6	31	5	10	51	1	7	49	: 156	1195	5 7. 7	88
DARDANELLE LOCK & DAM	1	12	54	1	7	77	3	13	42	1	7	40	: 318	1864	5.9	55
DZARK LOCK & DAM	1	11	30	2	10	31	5	11	35	2	10	40	: 229	2022	8.8	70
LOCK & DAM 13	1	9	30	1	9	66	4	11	31	2	10	50	: 57	807	14.2	. 68



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS - 1863 - A

EROC	DISTRICT	NAME	DIVISION NAME	101	ITHS REPORTED	
M5	TULSA		SOUTHWESTERN	4/83	5/83	6/83
RIVER		LCODE-LOCK NAME		LEN/WID/DRAFT	(FT/FT/FT)	
ARKANSAS RIV	ER	21-W D MAYO LOCK	& DAM	0600/0110/14.0		
		22-ROBERT S KERR	LOCK & DAM &RES	0600/0110/14.0		
		23-WEBBERS FALLS	LOCK & DAN	0600/0110/14.0		
		24-CHOUTEAU LOCK	& DAM	0670/0110/14.0		
		25-NEWT GRAHAM L	OCK & DAM	0670/0110/14.0		

EROC DISTRICT (NAME	- - ·	ISION NAM THWESTERM	-			4/83		ONTHS REF 5/83		6/	83
RIVER/LOCK NAME	TON		VESSL OTHER	VESSL TOTAL	BARGS EMPTY	BARGS Full	BARGES TOTAL	LOCKGS Commer	RECRIN		TOTAL	TONNAGE (KTONS)
ARKANSAS RIVE	R											
W D MAYO LOCK & DAN		***										
UPBOUND STATISTICS	9	7 116	9	222	308	149	457	100	40	6	146	209
DOWNBOUND STATISTICS	9	1 142	13	246	46	369	415	98	50	7	155	582
TOTALS	18	3 258	22	468	354	518	872	198	90	13	301	791
ROBERT S KERR LOCK & D	AM &RES	***										
UPBOUND STATISTICS	91	125	6	229	310	155	465	101	64	6	171	210
DOWNBOUND STATISTICS	9	2 138	7	237	46	375	421	99	66	7	172	570
TOTALS	19	263	13	466	356	530	886	200	130	13	343	780
WEBBERS FALLS LOCK & D	AH	***										
UPBOUND STATISTICS	9:	2 63	5	160	204	141	345	95	44	4	143	202
DOWNBOUND STATISTICS	8	9 70	10	169	75	255	330	97	43	3	143	407
TOTALS	18	1 133	15	329	279	396	675	192	87	7	286	609
CHOUTEAU LOCK & DAN		***										
UPBOUND STATISTICS	8) 11	10	101	145	115	260	88	5	5	98	145
DOWNBOUND STATISTICS	7	7 17	10	104	50	188	238	84	9	5	98	317
TOTALS	15	7 28	20	205	195	303	498	172	14	10	196	462
NEWT GRAHAM LOCK & DAM		***										
UPBOUND STATISTICS	7(3 16	10	104	143	112	255	86	15	3	104	140
DOWNBOUND STATISTICS	7	7 19	12	108	55	189	244	86	17	3	106	306
TOTALS	15	5 35	22	212	198	301	499	172	32	6	210	446

EROC M5	DISTRICT NAME TULSA			-		ON NA JESTER							4/83	;	H	ONTHS RE 5/8		6/	83
		MIN	APPRO		: MI	ENT	RY		Ç	HAMBE			EXIT AVG	MAX	:	DELAYED VESSELS	TIME	DELAY AVG MINUTES)	DELAY Max
ARK	ANSAS RIVER																		
W D MAYD LOC	K & DAM	1	10	54		1	7 50	0	5	9	21	1	8	67	:	9	149	16.6	45
ROBERT S KER	R LOCK & DAM &RE	1	8	38		1	7 3	9	6	14	24	2	9	47	:	52	783	15.1	78
WEBBERS FALL	S LOCK & DAN	1	12	45		1	7 3	7	5	19	59	2	6	36	;	54	580	10.7	34
CHOUTEAU LOC	K & DAM	1	8	29		1	7 6	5	5	15	31	2	8	29	:	97	146	1.5	21
NEWT GRAHAM	LOCK & DAM	1	9	30		1	7 30	0	5	14	36	3	11	45	:	40	713	17.8	400

